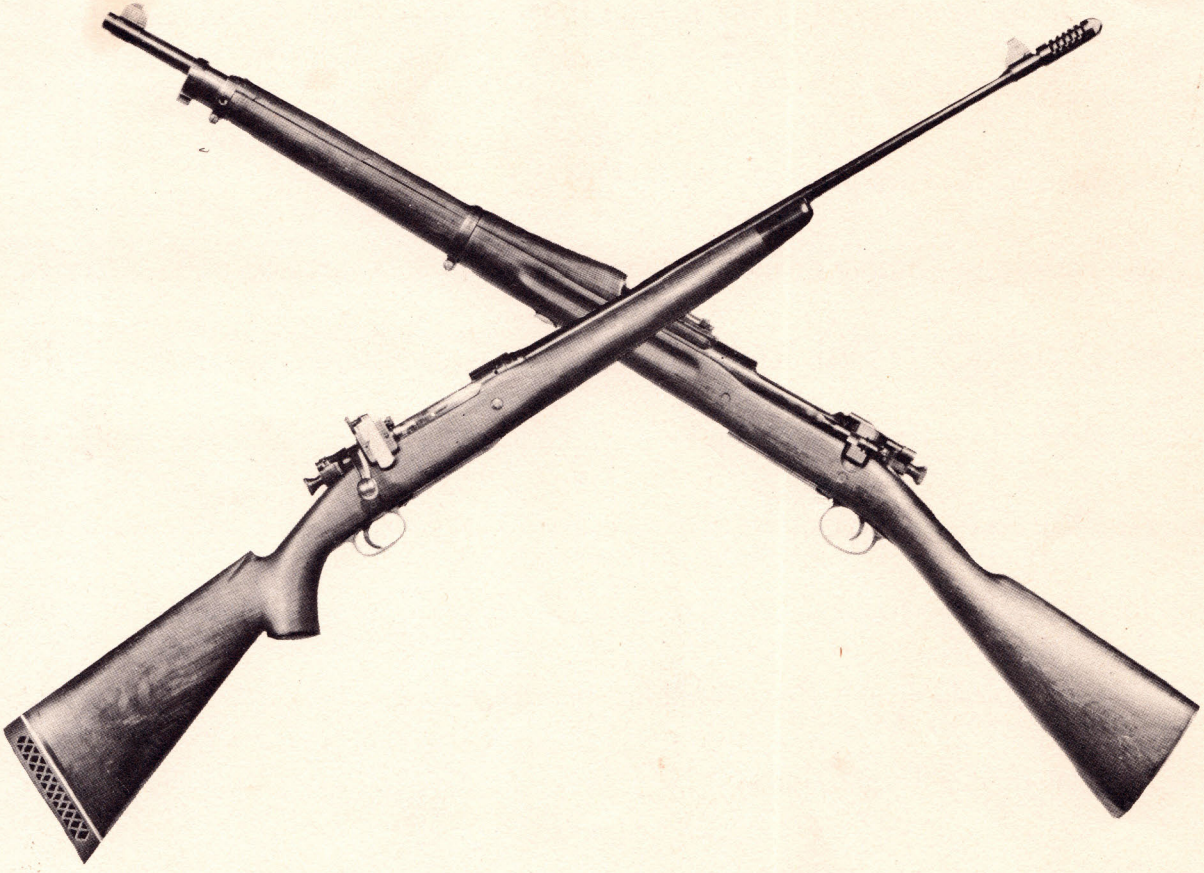
JOHNSON AUTOMATICS

CUSTOM GUN DEPARTMENT

1948 Catalogue



JOHNSON AUTOMATICS MANUFACTURING CO.

PROVIDENCE 1, RHODE ISLAND

LIST OF CONTENTS

Illustration of Johnson Military Arms 2

Description of Military Arms and their Conversion to Sporters 3

Shotguns, Pistols & Revolvers 5

Modern Cartridges and Ballistics Data 6

Military Mauser Rifles 8

Johnson Sporter Conversions of Mauser Rifles 9

The Model 1917 (Enfield) Rifle 10

Johnson Sporter Conversions of the Enfield Rifle 11

The Springfield Rifle Model 1903 12

Johnson Sporter Conversions of the Springfield 13

Johnson Barrels — Outline & Specifications 14

Available Calibres & Special Work 16

General Price List — Gunsmith Work 18

General Price List — Accessories 19

The Johnson Muzzle Brake 20

The Johnson Overhaul and Reconditioning Service 21

The Johnson Indoor Target Gun ..... *Back Cover*

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JOHNSON AUTOMATICS MANUFACTURING CO.

PROVIDENCE 1, RHODE ISLAND

(Street Address — 60 Aleppo St.)

Johnson Barrels Are Accurate!!

THE WAR TROPHY SAFETY COMMITTEE PROGRAM

World War II is over. But death to Americans from World War II weapons and explosives will not be over for some time to come.

The G.I. was the greatest souvenir hunter history has ever known, and the trophies he brought back range all the way from Wermacht arm bands to machine guns and explosives of the deadliest sort. With the primary purpose of promoting civilian safety, War Trophy Safety Committees have been formed in Washington and throughout the country to render harmless these belated hazards of war and save American lives. Its members include representatives of the Alcohol Tax Unit, Bureau of Internal Revenue, U. S. Treasury Department; the National Rifle Association; the Army; and the Navy, augmented by city, county, and state law enforcement officers.

The items about which most concern is felt at present include serviceable, fully automatic firearms of all types and dangerous explosives, either in the form of shells and hand grenades or demolition equipment, as well as booby traps that have not yet caught their victims.

Fully automatic weapons, such as machine guns and machine pistols in firing condition, have no place in American civilian life and are dangerous to their users and those around them except in the hands of qualified experts. While they remain in usable condition, there is always the danger of their falling into the hands of the criminal element to the further hazard of effective law enforcement. They are relatively so inaccurate that they would be useless for hunting from this characteristic alone, aside from their other drawbacks for this purpose.

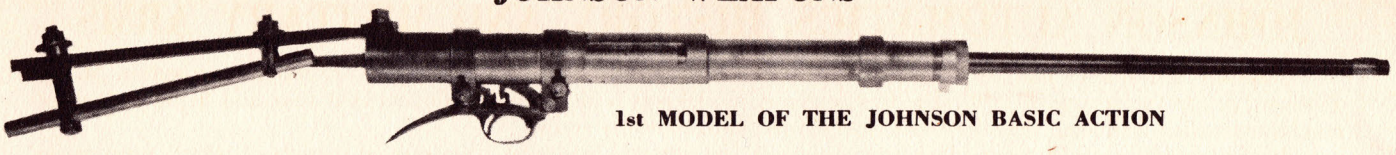
While explosives, such as hand grenades, shells, and even small arms ammunition, are not covered by the National Firearms Act, they are even more of a menace than fully automatic weapons in that they are always loaded and always ready to cause death and injury as well as, in many cases, extensive property damage. Such explosives, some of which were left over from World War I, are still killing and maiming grown ups and children, even after a lapse as great as twenty years.

War is bad enough in itself to need no such dangerous reminders of it as these souvenirs. Turn in any such item to your local Alcohol Tax Unit, Police Department, or Department of Public Safety for expert opinion.

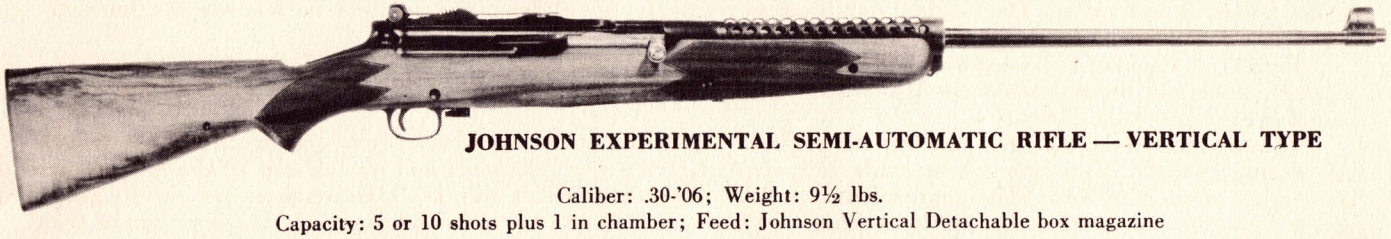
In the interests of Public safety and good sportsmanship, we are glad to publish the above appeal from the War Trophy Safety Committee. We shall also be glad to help in any way that we can in furthering this program.

JOHNSON AUTOMATICS, INC.

JOHNSON WEAPONS



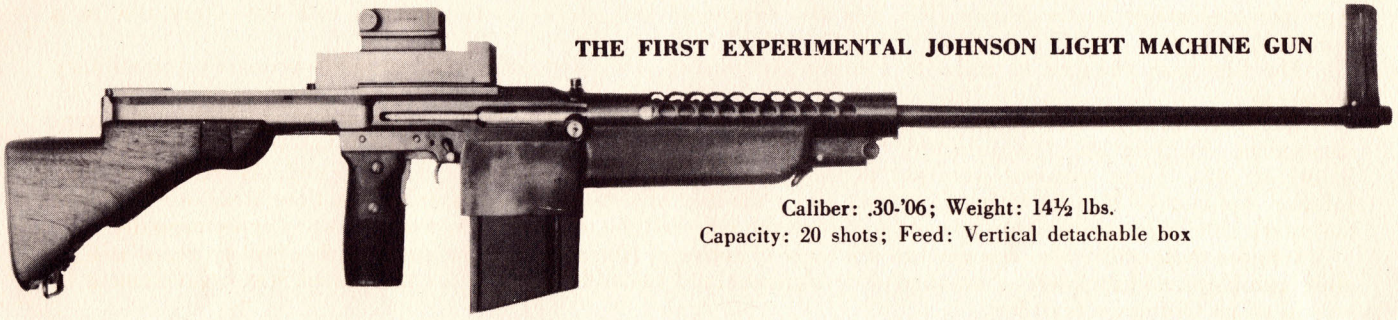
1st MODEL OF THE JOHNSON BASIC ACTION



JOHNSON EXPERIMENTAL SEMI-AUTOMATIC RIFLE — VERTICAL TYPE

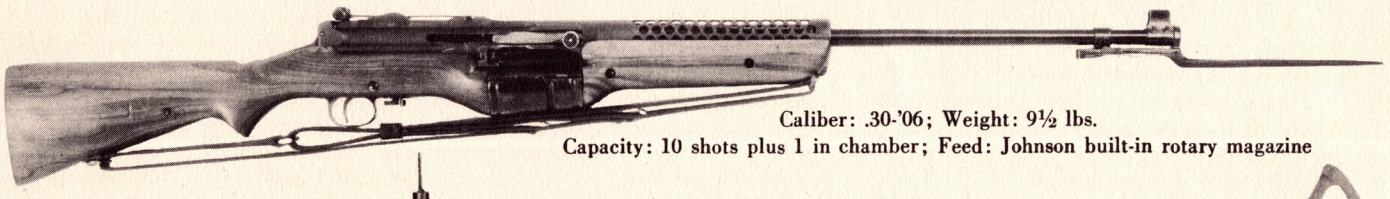
Caliber: .30-'06; Weight: 9½ lbs.
Capacity: 5 or 10 shots plus 1 in chamber; Feed: Johnson Vertical Detachable box magazine

THE FIRST EXPERIMENTAL JOHNSON LIGHT MACHINE GUN

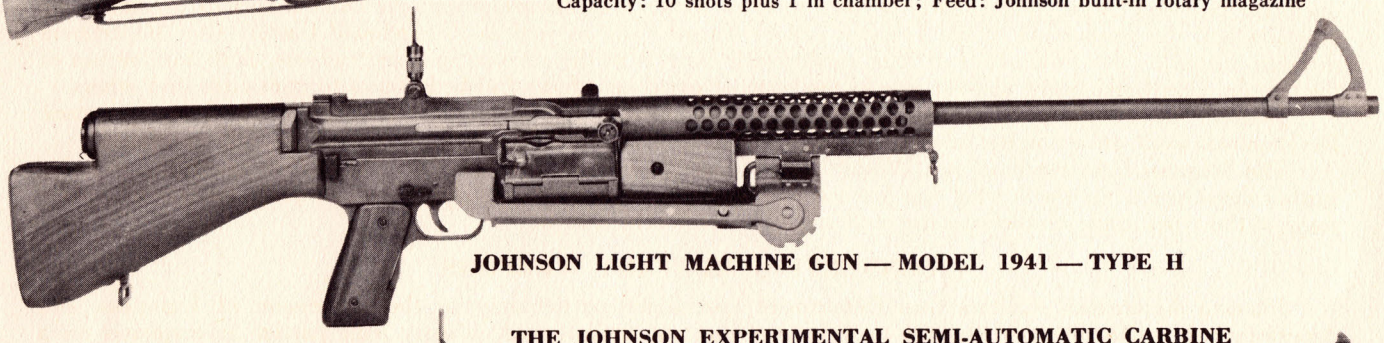


Caliber: .30-'06; Weight: 14½ lbs.
Capacity: 20 shots; Feed: Vertical detachable box

JOHNSON SEMI-AUTOMATIC MILITARY RIFLE — ROTARY TYPE

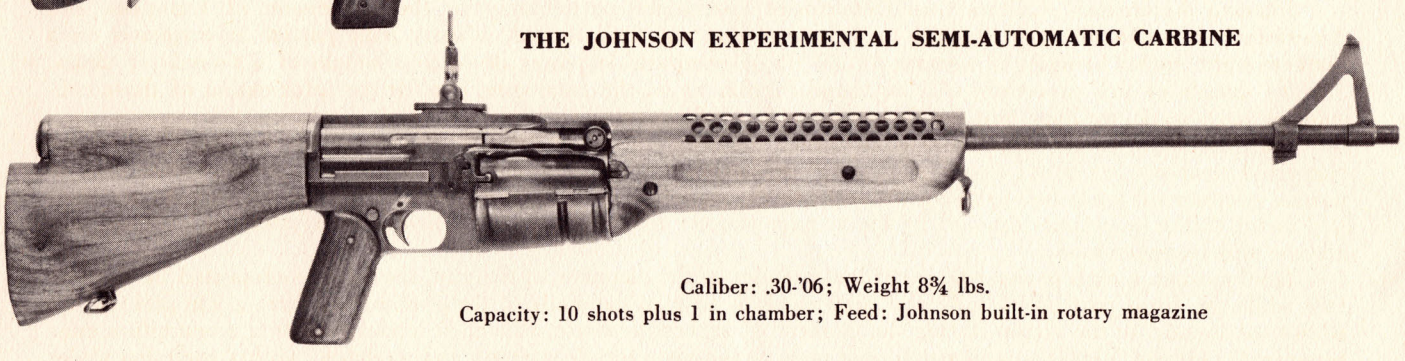


Caliber: .30-'06; Weight: 9½ lbs.
Capacity: 10 shots plus 1 in chamber; Feed: Johnson built-in rotary magazine



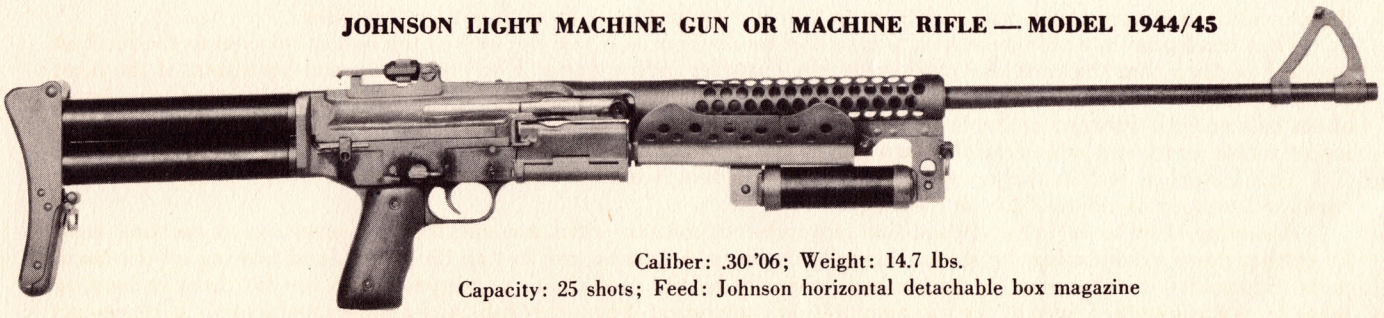
JOHNSON LIGHT MACHINE GUN — MODEL 1941 — TYPE H

THE JOHNSON EXPERIMENTAL SEMI-AUTOMATIC CARBINE



Caliber: .30-'06; Weight 8¾ lbs.
Capacity: 10 shots plus 1 in chamber; Feed: Johnson built-in rotary magazine

JOHNSON LIGHT MACHINE GUN OR MACHINE RIFLE — MODEL 1944/45



Caliber: .30-'06; Weight: 14.7 lbs.
Capacity: 25 shots; Feed: Johnson horizontal detachable box magazine

JOHNSON AUTOMATICS, HISTORY AND MILITARY ARMS

Johnson Automatics had its origin in the invention of the basic Johnson short recoil action by Captain M. M. Johnson, Jr., in the spring of 1936. The first working model was built in Boston during that year and firing tests were conducted which indicated that the basic action was fundamentally sound.

Its first application to a complete firearm was in the vertical feed type rifle, several models of which were made in the following year or so. The original organization set up for the development of these models was the Johnson Patent Trust, holders of the original Johnson Patent.

Further developments brought into being more models and the Johnson Automatics Trust, organized for the extensive testing of Johnson weapons. At that time the Johnson action was applied to the first light machine gun to be manufactured under the system.

The original model machine gun and the vertical model rifle, in its completed form, were offered for military sale during 1938-39. No weapons in quantity of these early types were produced and no Johnson rifles were put on the market as sporting arms. The approaching war led to concentration on military type weapons and the Johnson rotary feed rifle was developed from the original vertical model. At this time, the Johnson light machine gun of the type later designated as the Model 1941 was also developed and offered in conjunction with the rotary rifle as a companion weapon.

The firm now changed its name to Johnson Automatics, Inc., and offered its weapons primarily for military purposes.

An order received in the late summer of 1940 from the Netherlands Indies Government resulted in the commencement of a program of manufacture of the rotary-type rifle and the horizontal feed Johnson light machine gun, Model of 1941. These weapons were put in production by Johnson Automatics, Incorporated, its subsidiary, The Johnson Automatics Manufacturing Company and a number of subcontractors. During this time a carbine model of the rotary rifle, having some characteristics of both the rifle and the machine gun, was developed experimentally.

Johnson Automatics also manufactured a large quantity of rifle and machine gun barrels of all types, as well as other gun parts, and took over a number of development and research contracts for the United States Government in several of its Ordnance branches.

From the summer of 1942 to the end of the war Johnson weapons were in combat in the hands of the Netherlands Indies Army, the United States Marines, the First Special Service Force U. S. Army ("The Black Devils of Anzio"), The Kachin Raiders, and other United Nations soldiers. Many favorable reports on the performance of the Johnson weapons in actions in the Pacific and other battle areas came back from the forces using them, and we are most gratified to know that Johnson weapons helped in some part to bring about the victory of the United Nations.

As a result of wartime experience, the Custom Gun Department was opened at about the time of the close of World War II to utilize facilities already at hand for gun work of all types. Johnson Automatics is at present operating in a new factory particularly devoted to arms research and development, the manufacture of various metal products and the production of the Johnson Indoor Target Gun, as well as to expanded Custom Gun Department services, including the production of high quality rifle barrels in the various sporting calibers, both for the use of the Custom Gun Department and for sale in the form of partly or wholly finished blanks to gunsmiths and others.

Johnson Automatics is also continuing and expanding a number of its wartime activities in its present program. Development work on a number of weapons, which even now cannot be publicized, is being actively continued.

The Johnson light machine gun, Model 1944-45, which was not completed by the end of hostilities, is being further developed in line with what was learned during the war. This is being offered as a military weapon to replace some of the types made obsolete by the modern tactics of World War II.

CONVERTING MILITARY WEAPONS

Johnson Automatics' Custom Gun Department specializes particularly in the conversion of European and American bolt action military weapons to American hunting designs and calibers with particular emphasis on a featherweight model bringing a weapon of .30-'06 or comparable power down to a weight of 7 pounds or under. Specific details of this procedure will be found further on in the catalogue, but for the information of those considering such work, we hope that the following will be of interest.

The first thing to be considered in any work on firearms of any type is, of course, safety, and all Johnson-converted weapons are proof tested with proof ammunition of considerably greater breech pressure than that of normal commercial loads before being delivered to the customer. Proper headspace and the use of correct cartridges is a factor that is sometimes ignored by the average shooter as "headspace" is a somewhat mysterious term and one not too widely understood.

Briefly, when a high power rifle cartridge explodes in the chamber of the gun, the head is supported by the bolt face while the front part of its body and neck expands to grip the walls of the chamber to form a gas seal and an additional support to the action during the moment of highest pressure, which, in modern hunting ammunition runs between 35,000 and 50,000 pounds per square inch. Brass has a tensile strength and stretching ability such that under these conditions it can stretch with safety up to 8 or 9 thousandths of an inch without breaking.

Thus headspace in a rifle means the position of the locking lugs and the face of the bolt in relation to the furthest forward position that the cartridge can take in the chamber before firing. Fired in this forward position, if the head of the cartridge is not supported within less than 8 or 9 thousandths clearance, the brass cartridge case may break about half an inch forward of the head. This releases gas pressure at 40 or 50 thousand pounds which may blow the whole action apart and will certainly burn the hands and face of the shooter.

This feature as well as the general strength of the action is always tested with the greatest care before a Johnson converted weapon is released to the customer.

Assuming them to be in good condition, a number of military rifles are suitable for conversion to sporting arms by cutting down or replacing the stock, generally cleaning, adjusting and testing the action, and blueing all the metal parts. Suitability of these arms is determined primarily by the availability of proper cartridges for them in hunting loads from the standard lines of the big ammunition companies. Where this job can be done satisfactorily it represents

the cheapest form of high powered hunting arm to be obtained. Rifles suitable for such conversion, assuming that the barrel is in good shape, include the Krag rifle, Models 1892-1898, .30-40 caliber, the Springfield rifle Model 1903, in caliber .30-'06, and its various modifications, the Model 1917 or "Enfield" rifle in .30-'06 caliber, the German Mauser Model of 1898 in 8 mm. Mauser caliber, and the Polish, Czech, and Chinese Mausers in the same caliber, a number of earlier Mausers, particularly the Spanish and some South American in 7 mm. Mauser caliber, the British short magazine Lee-Enfield in models from 1888 to the present time, in .303 rimmed British caliber, and the French Lebel rifles in 8 mm. Lebel caliber. Cartridges for all of these are normally obtainable in hunting loads in this country and are all within reasonable limits of hunting quality and power.

This extent of conversion gives the shooter a weapon in its original caliber and usually of somewhat less than its original weight but still utilizing the military type barrel and whatever type of stock modification is desired. For further conversion to selected American calibers and with special target or featherweight barrels, only those weapons using cartridges of breech pressure comparable to American high powered hunting ammunition are suitable. In addition to the Springfield and M1917 which were made for the .30-'06 cartridge, this includes among foreign arms particularly the series of Mauser rifles based on the model of 1898 in 8 mm. Mauser caliber, and including the Polish, Czechoslovakian and Belgian Mausers M1924 and the Chinese Mauser.

The earlier model Mauser rifles such as the '88 and the 7 mm. series are designed for cartridges of breech pressure from 5,000 to 15,000 pounds lower than the normal 50,000 pound pressure of such cartridges as the .220 Winchester Swift, .257 Roberts, .270 Winchester, and .30-'06, which are among our commonest hunting loads, and they, therefore, are not normally subjects for conversion to these cartridges, but can be converted to the next lower series such as the .300 Savage, .250-3000 Savage, etc.

The series of the military Mannlicher rifles used throughout Europe, which include the straight pull Austrian 8 mm. Mannlicher and the turning bolt Dutch and Rumanian Mannlichers of 6.5 caliber, are not readily adaptable or usable in this country, because suitable cartridges are not manufactured here and they require a special clip which becomes a part of the repeating action in order to be used as a repeating arm. Their cartridge series are also in the 40,000 pound class and too low for suitable conversion to the highest power American loads. They also use rimmed cartridges of earlier types. The Italian military arm, the Mannlicher-Carcano in 6.5 and 7.35 mm. caliber, is one of the worst examples of the Mannlicher action available and one that is generally considered unsafe for conversion on account of its poor quality of manufacture as well as its other undesirable characteristics.

The French rifle model MAS 1929, and the model 1934, which is a modified Lebel action using a staggered column box magazine, are by their quality, not suitable for conversion to an American caliber and their cartridges, which are the 7.5 mm. French rimless cartridges, are not manufactured in this country in any form so they are not suitable for cutting down to sporting arms although the cartridge itself is a relatively well designed one.

The Japanese Arisaka rifle in 6.5 (.25) and 7.7 mm. (.31), the models of 1907 and 1939, is also generally considered an unsuitable arm for conversion although it is an essentially Mauser type action and in some cases appears to be well made. However, so many extremely poor quality Japanese rifles have appeared in this country that it has been necessary for us to make a special inspection charge on these to determine the few that are worth working on. See page 17.

Among the European sporting bolt action arms, the majority of them are built on the Mauser action and these are in many cases very finely made weapons of superior quality. Those chambered for the "8 mm. Mauser" (7.92 x 57) or "7 mm. Mauser" (7 x 57) are excellent weapons for use with American loadings of the 8 mm. Mauser and 7 mm. Mauser cartridges, without alteration or conversion, other than checking for general safety and proper head-space. Unfortunately, a great many rifles of excellent quality are chambered for European cartridges which are not obtainable in this country and under postwar circumstances, probably never will be. These are individual cases and must be considered as such, but those made for cartridges of power comparable to our high powered types are excellent subjects for conversion, and barrels can be fitted to them corresponding in general to the original barrel excepting for American calibers. Magazines in most cases can be lengthened to handle a suitable American cartridge and one of the commonest "Magnum" German cartridges, the 7.92 x 60 mm. is only slightly shorter than our .30-'06 so that in this case the magazine needs but little alteration. Such a weapon is a particularly suitable one to re-barrel in a .30-'06 caliber.

The Mannlicher type sporting rifles, usually fitted with the Schoenauer rotary magazine, were manufactured in a series of cartridges which includes the standard United States .30-'06 sporting cartridges and others of comparable power. The Greek Mannlicher model 1903 military rifle in 6.5 caliber also utilizes the Schoenauer rotary magazine. These magazines do not require a clip as part of the action and arms of this type are suitable for conversion to American cartridges comparable in power to the loads that the guns were originally chambered for and close enough in size so that they will operate in the rotary magazine which is not as readily alterable as the staggered column box magazine of the Mauser rifle. They can be used with a number of rimless American hunting cartridges. The Mannlicher sporting arms are of excellent quality and usually very finely made. Whether they are adaptable to American ammunition or made in cartridges available here, they are among the finest of the European arms.

One caution should be observed with Mannlicher rifles, however: their cartridges are not identical to Mauser cartridges in type or length and cartridges designed for Mauser rifles are not usually suitable for use in Mannlichers. This is particularly true in the 8 mm. rimless Mannlicher cartridge used in the Mannlicher Schoenauer rifle. This is an 8 x 56 mm. case and definitely one millimeter shorter than the Mauser cartridge as well as using a slightly larger diameter bullet. The Mauser cartridge will not work satisfactorily in a Mannlicher chamber and the use of Mannlicher cartridges in a Mauser rifle creates head-space problems that have, in a number of cases, blown up actions used with them.

The Krag while suitable for conversion to some other low powered American rimmed cartridges, is not strong enough to use with any of the highest power cartridges and must be rebarreled only in rimmed cartridges with a breech pressure less than 40,000 pounds. It is, however, a favorite for rebarreling as a single shot varmint rifle.

The British and French rifles, while relatively well manufactured and safe weapons with their own cartridges, are not readily convertible to American ammunition as both cartridges differ considerably from our present day hunting loads; therefore, rebarreling of these two arms into American calibers is not advisable.

Johnson rebarreling in the other weapons mentioned gives the owner a choice of a number of the most popular hunting calibers now available, see page 16 for complete list, and a barrel made in our barrel department which made over 150,000 barrels during World War II and is now turning out custom barrels of superlative quality.

Johnson barrels can be supplied either in the standard "target-sporter" weight or in a special Johnson development, the featherweight barrel, bringing the weight of a finished high powered sporting rifle from the customary 8 to 8¼ pounds down to 7 pounds or under. While the featherweight barrel has an appearance of slimness that brings questions of both safety and accuracy into the mind of anyone seeing it for the first time, it was specially developed by our research department in connection with government research and development work during the war. It now adapts a refinement of principles discovered at that time to satisfactory hunting dimensions and characteristics.

The safety factor is still unbelievably high in these barrels. They have been fired with two bullets jammed in the bore in front of a 70,000 pound .30-'06 proof load, the load has driven all three bullets out of the barrel repeatedly without the slightest indication of damage or excessive strain to the barrel itself. Accuracy is satisfactory for hunting purposes, and particularly in conjunction with the Johnson Muzzle Brake, another Johnson development from wartime experiments; it shows up satisfactorily in comparison with barrels of standard weight.

SHOT GUN AND RIFLE COMBINATIONS

A great many European sporting arms include the combination of shotgun and rifle barrels to make two or three barreled guns. A considerable quantity of these have been imported by returning G.I.'s and they are unfortunately for the most part not satisfactory weapons to work upon except in so far as cleaning and reblueing is concerned.

European shotgun chambers are usually shorter than the American chambers for our standard long cartridges and this should be watched closely in using the shotgun barrels. Otherwise, the shotgun barrels are as satisfactory as comparable shotguns in this country. The Rifle barrels, however, while we have had many requests to convert them to American calibers, do not lend themselves for the most part to such conversion, as they are usually chambered for European rimmed cartridges of different shape and very different ballistic characteristics from cartridges made in this country. We also have no available information on the exact chamber pressures of these cartridges except that in general they are lower than our high powered hunting loads. In cutting into any chamber of course, to convert it. to take an American cartridge of comparable caliber, the safety factor is even more questionable than before. The cost of rebarreling complete and assembling the barrel to such a combination is out of all proportion to the value of the result, this also is impractical. Therefore, we must decline in general to make any attempt to build over combination guns.

While American and European loadings may vary in pressure and therefore careful proof testing is always advised, — for the benefit of those who have foreign weapons including rifle barrels the following list of European case sizes and their American equivalents is given.

NOTE: Use these merely as indications and proceed with care. *Better be safe than sorry.*

GERMAN LISTING	AMERICAN LISTING	GERMAN LISTING	AMERICAN LISTING
5.6 mm. Kurz - Lang	.22 Short — Long	6.5 x 41 mm. R.	.25-20 Winchester
5.6 mm. Lang fur Büchsen	.22 Long Rifle	6.5 x 52 mm. R.	.25-35 Winchester
5.6 x 35 mm. R. Vierling	.22 Hornet	7.62 x 51 mm. R.	.30-30 Winchester
5.6 x 52 mm. R.	.22 Savage High Power	7.62 x 63 mm.	.30-'06

PISTOLS AND REVOLVERS

A considerable quantity of European automatic pistols have also appeared in this country, and for the most part these are practicable and usable weapons just as they are, as most of them are chambered for cartridges available in this country. The majority of all European pistols are chambered for one of the following cartridges which we give herewith in table form with their American equivalents. The relatively few pistols not so chambered are impractical to alter to an American cartridge. Any of these weapons can, however, be checked over, generally cleaned up and reblued to make excellent looking weapons.

EUROPEAN LISTING	AMERICAN LISTING	EUROPEAN LISTING	AMERICAN LISTING
6.35 Browning	.25 A.C.P.	9 mm. Browning Short	.380 A.C.P.
7.63 Mauser	.30 (7.63) Mauser	9 mm. Kurz	
7.65 Parabellum	.30 (7.65) Luger	9 mm. Corto	
7.65 Browning	.32 A.C.P.	9 mm. Bergmann Bayard	.38 A.C.P.
.380 Pistol No. 2 (English)	.38 S & W	9 mm. Parabellum	9 mm. Luger
		9 mm. Pistole Patrone '08	

CONVERSION PROCEDURE

All guns that come to us for conversion are at first checked for general condition and original type and caliber of the action. When the main check indicates that the weapon is a suitable one for conversion to the caliber requested or for general overhauling and conversion to a sporter in its original caliber, the weapon is taken completely apart, cleaned and the action smoothed up so that it will operate cleanly and correctly. If a new barrel is to be used, it is threaded for the action supplied and assembled to the proper headspace, at which point it is inspected and proof fired to make doubly sure that the action is now in a safe and proper condition. The whole action and metal parts are then thoroughly polished and blued with the characteristic and beautiful Johnson deep factory blue. When the desired stock work is completed, the stock is assembled to the metal work and whatever sights have been specified. The action is then fired for functioning and rechecked for proper sighting and performance. When it is returned to the owner, he has a modern accurate hunting or target arm, proof tested for safety, designed to shoot a high powered cartridge available in this country and as fine in appearance and quality as can be turned out for the cost involved.

REMINGTON BALLISTICS

"KLEANBORE" Oil Proof Pistol and Revolver Cartridges

CARTRIDGE	BULLET Type	BULLET Weight	Muzzle Velocity	Muzzle Energy	Barrel Length	Penetration ⅞" Pine Boards
.25 (6.35m/m) Automatic	M.C.	50	820	75	2	3
.30 (7.63m/m) Mauser Automatic	M.C.	85	1420	380	5½	11
.30 (7.65m/m) Luger Automatic	M.C.	93	1250	323	4½	11
.30 (7.65m/m) Luger Automatic	S.P.	93	1250	323	4½	11
.30 (7.65m/m) Luger Automatic	H.P.	93	1250	323	4½	11
.32 Smith & Wesson	Lead	88	720	98	3	3
.32 Smith & Wesson Long	Lead	98	820	146	4¼	4
.32 S & W Long Wad Cutter .....TARGETMASTER	Lead	98	770	129	6	—
.32 Short Colt	Lead	80	800	114	4	3
.32 Long Colt	Lead	82	800	117	4	3
.32 Colt New Police (Police Positive)	Lead	100	795	138	4	3
.32 (7.65m/m) Automatic	M.C.	71	980	152	4	5
.357 Magnum	M.P.	158	1510	800	8¾	12½
9 m/m Luger Automatic	H.P.	124	1150	365	4	10
9 m/m Luger Automatic	M.C.	124	1150	365	4	10
.380 (9m/m) Automatic	M.C.	95	970	199	3¾	5½
.38 Super Automatic Hi-Speed	M.C.	130	1300	488	5	10
.38 Super Automatic Hi-Speed	Mush.	130	1300	488	5	10
.38 Automatic	M.C.	130	1070	331	4½	9
.38 Smith & Wesson	Lead	146	745	179	4	4
.38 Special (Police Service)	Lead	158	870	266	6	6½
.38 Special (Police Service)	M.P.	158	870	266	6	6½
.38 Special	Lead	200	745	247	6	7½
.38 Special Wad Cutter	Lead	146	770	193	6	—
.38 Special Wad Cutter .....TARGETMASTER	Lead	146	770	193	6	—
.38 Special .....TARGETMASTER	Lead	158	870	266	6	6½
.38 Special Metal Penetrating .....HI-WAY MASTER	Spl.	110	1330	433	5	—
.38 Special Hi-Speed	M.P.	158	1115	436	5	7½
.38 Special Hi-Speed	Lead	158	1115	436	5	7½
.38 Colt New Police (Police Positive)	Lead	150	695	161	4	4
.38 Short Colt	Lead	125	770	165	6	4
.38 Long Colt	Lead	150	785	205	6	6
.38 Colt Special	Lead	158	870	266	6	6½
.41 Long Colt	Lead	195	745	241	6	3
.44 Smith & Wesson Russian	Lead	246	770	324	6½	7½
.44 Smith & Wesson Special	Lead	246	770	324	6½	7½
.45 Colt	Lead	250	870	421	5½	6
.45 Automatic	M.C.	230	860	378	5	6
.45 Automatic .....TARGETMASTER	M.C.	230	750	288	5	—
.45 Automatic Metal Penetrating .....HI-WAY MASTER	Spl.	173	1140	500	5	—
.45 Auto Rim	M.C.	230	890	343	5½	6
.45 Auto Rim	Lead	230	820	343	5½	6

"KLEANBORE" RIM FIRE CARTRIDGES

"KLEANBORE" Hi-Speed — Highest Velocity

CARTRIDGE	BULLET Weight Grains	BULLET Type	VELOCITY Foot Seconds Muzzle	VELOCITY Foot Seconds 100 Yards	ENERGY Foot Pounds Muzzle	ENERGY Foot Pounds 100 Yards	TRAJECTORY Inches 100 Yards
.22 Short	29	Lead	1130	925	82	55	4.1
.22 Short	27	H.P.	1155	925	80	51	4.1
.22 Long	29	Lead	1375	1020	122	67	3.2
.22 Long	27	H.P.	1395	1010	117	61	3.3
.22 Long Rifle	40	Lead	1375	1080	168	104	2.9
.22 Long Rifle	36	H.P.	1400	1075	157	92	3.0
.22 W.R.F. (Remington Special)	45	Lead	1450	1110	210	123	2.7
.22 W.R.F. (Remington Special)	40	H.P.	1475	1095	193	107	2.7
New and Improved "KLEANBORE" — Intermediate Velocity							
.22 Short	29	Lead	1030	860	68	48	5.1
.22 Long	29	Lead	1080	900	75	52	4.3
.22 Long Rifle	40	Lead	1230	1030	135	94	3.8
"KLEANBORE" — Standard Velocity							
.22. (B.B.) Bullet Breech Caps	20	Lead	780	—	24	—	—
.22 (C.B.) Conical Bullet Caps	29	Lead	720	605	33	24	—
.22 Short Gallery Special Spatterless	28	Lead	995	—	57	—	—
.22 Long Rifle	40	Lead	1130	970	111	84	4.0
.22 Extra Long	40	Lead	1030	900	94	72	4.9
.22 Remington Autoloading	45	Lead	920	—	85	—	5.5
.22 W.R.F. (Remington Special)	45	Lead	1105	955	122	91	4.0
.22 Winchester Automatic	45	Lead	1055	930	111	86	4.6
.22 Winchester Automatic	45	H.P.	1055	930	111	86	4.6
.25 Short Stevens	67	Lead	945	845	129	103	5.6
.25 Stevens	67	Lead	1130	985	184	140	3.8
.32 Short	80	Lead	945	840	159	125	5.3
.32 Long	90	Lead	945	850	179	144	5.3
.41 Short	129	Lead	520	—	78	—	—
.41 Swiss	300	Lead	1325	1165	1170	905	2.9
Special Match Cartridges							
.22 Long Rifle .....PALMA	40	Lead	1100	950	108	80	4.3
.22 Long Rifle .....POLICE TARGETMASTER	40	Lead	1155	940	119	79	4.0 rifle
.22 Long Rifle .....POLICE TARGETMASTER	40	Lead	970	—	84	—	pistol

Powder—NOT "KLEANBORE."

CARTRIDGE	BULLET		VELOCITY—FOOT SECONDS				ENERGY—FOOT POUNDS				MID-RANGE TRAJECTORY—INCHES		
	Weight	Type	Muzzle	100 Yards	200	300	Muzzle	100 Yards	200	300	100 Yards	200	300
.218 Bee Hi-Speed	46	Mush.	2860	2260	1740	1330	835	520	310	180	0.8	3.5	10.5
.219 Zipper Hi-Speed	46	Mush.	3390	2720	2140	1640	1175	755	470	280	0.4	2.5	7.0
.219 Zipper Hi-Speed	56	Mush.	3050	2530	2070	1660	1155	795	535	345	0.6	2.5	8.0
.22 Hornet Hi-Speed	45	Mush.	2650	2080	1580	1220	700	430	250	150	0.8	4.0	12.5
.22 Hornet Hi-Speed	45	Ptd. S. P.	2600	2210	1860	1550	675	490	345	240	0.8	3.5	10.0
.22 Savage high power Hi-Speed	70	Mush.	2810	2400	2030	1700	1230	900	640	450	0.7	3.0	8.0
.220 Swift Hi-Speed	46	Mush.	4140	3370	2710	2130	1750	1160	750	465	0.3	1.5	4.5
.220 Swift Hi-Speed	48	Ptd. S. P.	4140	3490	3040	2570	1825	1300	985	705	0.3	1.5	3.5
6.5 m/m Mann-Schoen	150	S. P.	2260	2030	1810	1610	1700	1375	1090	865	0.9	4.0	10.5
.25-20 Single Shot	86	S. P.	1380	1150	1020	930	365	255	200	165	2.6	13.0	33.5
.25-20 Winchester Hi-Speed	60	Mush.	2210	1700	1300	1060	650	385	225	150	1.1	6.0	18.5
.25-20 Winchester	86	M. C.	1450	1190	1050	950	400	270	210	175	2.6	11.5	31.5
.25-20 Winchester	86	S. P.	1450	1190	1050	950	400	270	210	175	2.6	11.5	31.5
.25-20 Winchester	86	Lead	1450	1190	1050	950	400	270	210	175	2.6	11.5	31.5
.25 Remington Hi-Speed	87	Mush.	2710	2300	1930	1600	1420	1020	720	495	0.7	3.5	9.0
.25 Remington Express	117	Mush.	2300	2020	1760	1530	1375	1060	805	610	0.9	4.5	11.0
.25 Remington Express	117	S. P.	2300	2020	1760	1530	1375	1060	805	610	0.9	4.5	11.0
.257 Rem.-Rob. Hi-Speed	87	Mush.	3220	2770	2350	1980	2005	1485	1070	760	0.5	2.5	6.0
.25-35 Winchester Hi-Speed	87	Mush.	2650	2250	1880	1560	1355	980	685	470	0.7	3.5	9.5
.25-35 Winchester Express	117	M. C.	2280	1970	1690	1440	1350	1010	740	540	1.0	4.5	12.0
.25-35 Winchester Express	117	Mush.	2280	1970	1690	1440	1350	1010	740	540	1.0	4.5	12.0
.25-35 Winchester Express	117	S. P.	2280	1970	1690	1440	1350	1010	740	540	1.0	4.5	12.0
.250 Savage Hi-Speed	87	Mush.	3040	2600	2210	1840	1785	1305	945	655	0.6	2.5	7.0
.250 Savage Hi-Speed	100	Mush.	2810	2490	2180	1900	1755	1375	1055	800	0.6	3.0	7.0
.270 Winchester Hi-Speed	150	S. P.	2770	2490	2220	1970	2560	2065	1645	1295	0.6	3.0	7.0
7 m/m Mauser Express	175	S. P.	2460	2220	1990	1780	2350	1915	1540	1230	0.8	3.5	9.0
.30-30 Winchester Hi-Speed	110	Mush.	2720	2260	1840	1480	1810	1250	825	535	0.7	3.5	10.0
.30-30 Winchester Express	160	M. C.	2200	1910	1650	1420	1720	1295	970	720	1.0	5.0	12.5
.30-30 Winchester Express	165	Mush.	2200	1920	1670	1440	1770	1350	1020	760	1.0	4.5	12.5
.30 Remington Hi-Speed	110	Mush.	2720	2260	1840	1480	1810	1250	825	535	0.7	3.5	10.0
.30 Remington Express	160	M. C.	2200	1910	1650	1420	1720	1295	970	720	1.0	5.0	12.5
.30-40 Krag Hi-Speed Expdg.	180	Br. P.	2460	2250	2100	1930	2420	2020	1765	1490	0.7	3.5	8.0
.30-40 Krag Express	220	M. C.	2190	1980	1780	1600	2345	1915	1550	1250	1.0	4.5	11.0
.30-06 Springfield Hi-Speed	110	Mush.	3380	2850	2370	1940	2790	1980	1370	920	0.4	2.0	6.0
.30-06 Spfd. Hi-Speed Expdg.	150	Br. P.	2960	2720	2480	2260	2920	2465	2050	1700	0.5	2.5	6.0
.30-06 Springfield	172	M. C. T. H.	2700	2500	2260	2070	2785	2385	1950	1640	0.6	3.0	6.5
.30-06 Spfd. .....Palma Match	180	M. C. T. H.	2730	2540	2350	2170	2980	2580	2210	1890	0.6	2.5	6.5
.30-06 Spfd. Hi-Speed Expdg.	180	Br. P.	2690	2500	2310	2130	2895	2500	2135	1815	0.6	3.0	7.0
7.62 m/m Russian Hi-Speed	150	Br. P.	2810	2570	2330	2110	2635	2205	1750	1435	0.6	2.5	6.5
.300 Magnum Match (Rimless)	180	M. C. T. H.	3030	2820	2620	2430	3670	3180	2745	2360	0.5	2.0	5.5
.300 Savage Hi-Speed Expdg.	150	Br. P.	2660	2430	2210	2000	2360	1970	1625	1325	0.7	3.0	7.5
.303 British Express	215	S. P.	2160	1940	1740	1550	2230	1795	1445	1145	1.0	4.5	11.5
8 m/m Mauser Express	236	S. P.	2100	1890	1700	1530	2310	1875	1515	1230	1.1	5.0	12.0
8 m/m Special Hi-Speed	170	S. P.	2530	2210	1920	1660	2415	1845	1390	1040	0.8	3.5	9.0
8 m/m Lebel Hi-Speed	170	S. P.	2610	2320	2040	1780	2575	2030	1570	1195	0.7	3.0	8.5
.32-20 Winchester Hi-Speed	80	Mush.	2050	1520	1150	980	745	410	235	170	1.4	7.5	23.0
.32-20 Winchester	100	Lead	1280	1060	940	850	365	250	195	160	3.1	15.0	40.5
.32-20 Winchester	100	M. C.	1280	1060	940	850	365	250	195	160	3.1	15.0	40.5
.32-20 Winchester	100	S. P.	1280	1060	940	850	365	250	195	160	3.1	15.0	40.5
.32 Win. Special Hi-Speed	110	Mush.	2630	2140	1700	1340	1690	1120	705	440	0.7	3.5	11.5
.32 Winchester Self Loading	165	S. P.	1390	1190	1060	980	710	520	410	350	2.6	12.5	31.0
.32 Remington Hi-Speed	110	Mush.	2630	2140	1700	1350	1690	1120	705	445	0.8	4.0	11.0
.32 Remington Express	165	Mush.	2200	1900	1630	1390	1775	1325	975	710	1.0	4.5	12.5
.32 Remington Express	170	S. P.	2200	1910	1640	1400	1830	1380	1015	740	1.0	5.0	13.0
.32-40 Winchester	165	S. P.	1440	1230	1080	1000	760	555	430	365	2.6	12.0	28.0
.33 Winchester	200	S. P.	2180	1870	1600	1360	2110	1555	1135	820	1.1	5.0	13.5
.348 Winchester Hi-Speed	150	S. P.	2880	2380	1930	1550	2765	1890	1240	800	0.6	3.0	8.5
.348 Winchester Express	200	S. P.	2520	2160	1840	1560	2820	2075	1505	1080	0.8	4.0	10.0
.35 Winchester Self Loading	180	S. P.	1390	1170	1040	960	775	545	430	370	2.5	13.0	31.0
.351 Winchester Self Loading	180	S. P.	1850	1560	1310	1140	1370	975	685	520	1.5	7.5	19.0
.351 Winchester Self Loading	177	M. C.	1850	1560	1310	1140	1370	975	685	520	1.5	7.5	19.0
.35 Winchester	250	S. P.	2160	1910	1680	1480	2590	2025	1565	1215	1.1	5.0	12.0
.35 Remington Hi-Speed	150	Mush.	2360	1930	1560	1270	1860	1240	810	535	1.0	5.0	13.5
.35 Remington Express	200	Mush.	2180	1870	1590	1360	2110	1555	1125	820	1.0	5.0	13.0
.35 Remington	200	M. C.	2180	1870	1590	1360	2110	1555	1125	820	1.0	5.0	13.0
.38-40 Winchester Hi-Speed	145	Mush.	2060	1520	1140	980	1365	745	420	310	1.3	8.0	22.0
.38-40 Winchester	180	S. P.	1310	1090	960	870	685	475	370	305	3.2	15.5	37.5
.38-55 Winchester	255	S. P.	1320	1150	1050	980	985	750	625	545	3.0	13.5	32.5
.38-56 Winchester	255	S. P.	1400	1210	1090	1010	1110	830	675	580	2.7	11.5	29.0
.40-65 Winchester	260	S. P.	1360	1170	1050	970	1070	790	635	545	2.9	12.0	30.5
.40-82 Winchester	260	S. P.	1500	1260	1100	1010	1300	915	700	590	2.3	11.0	27.0
.401 Winchester Self Loading	200	S. P.	2140	1750	1420	1170	2035	1360	895	610	1.1	5.5	16.5
.405 Winchester	300	S. P.	2220	1940	1690	1460	3285	2510	1905	1420	1.0	4.5	12.0
.44-40 Winchester Hi-Speed	160	Mush.	1980	1430	1100	940	1395	730	430	315	1.6	8.0	25.5
.44-40 Winchester	200	S. P.	1300	1070	940	860	750	510	390	330	3.3	17.5	38.0
.45-70 Government	405	S. P.	1310	1160	1060	990	1545	1210	1010	880	2.8	14.0	32.5
.45-90 Winchester	300	S. P.	1530	1270	1090	1000	1560	1075	790	665	2.2	11.0	26.5

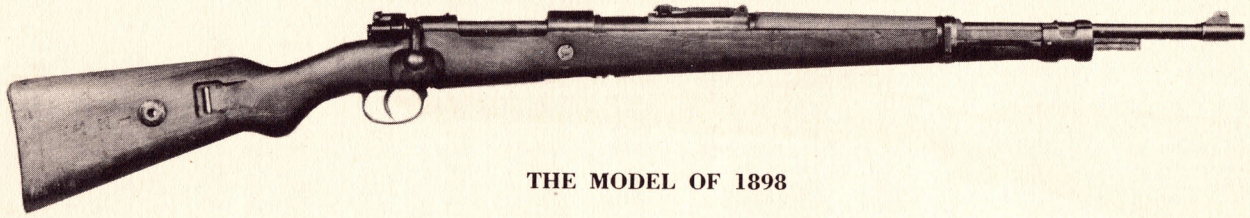
NOTE ON BALLISTICS CHARTS

The above charts show the ballistics of cartridges as manufactured just prior to World War II. Since then, a number of deletions have been made from this list. The complete list is shown, however, as some of the earlier cartridges are still available and it is thought that ballistics information on them will be of interest.

The following cartridges were discontinued by the National Bureau of Standards Simplified practice recommendations R62-47, taking effect January 1, 1947: RIMFIRE *.25 Stevens short, .41 short deringer, .41 Swiss-CENTERFIRE, .25-20 single shot, 6.5 mm. Mannlicher Schoenaur, .35 rimmed Winchester, .38-56 Winchester, .38-72 Winchester, .40-65 Winchester, .40-82 Winchester, .45-90 Winchester, .44 Gamegetter shot.* In addition, a cartridge which was manufactured by some of the companies just prior to the war, the *.455 Webley* English Service revolver cartridge, has also been discontinued.

The *.401 Winchester* self-loading and *.405 Winchester* were discontinued in the January bulletin, but latest information is that these two cartridges will be reinstated in the near future. So far as can be ascertained, all other cartridges on the above list are still retained as active items and will be available when general manufacturing conditions return to normal.

THE MAUSER RIFLE



THE MODEL OF 1898

History and Models — The Mauser rifle is a bolt action, repeating, military and sporting rifle which originated in the designs of Paul Mauser in the 1880s. The original German small bore, military rifle was the Military Model of 1888. This, while it used the cartridge case which has since become the 7.92 x 57 or 8mm. Mauser cartridge, utilized a Mannlicher type magazine with the clip of cartridges entering the action as a unit, the clip forming part of the magazine.

Mauser very soon modified this action to the more familiar Mauser action of the 1890s, taken up in 7 mm. by Spain in 1893, and in 8 mm. by Germany in 1898. German Mauser rifles are usually marked "Gew 98" in German script. This is an abbreviation for Gewehr 98 and means rifle model of 1898. The original arm was a long barreled model, similar to our old fashioned Krag in length, and was at that time also put out in a carbine model, a little shorter than our Springfield. Both of these types were in common use, particularly by the Germans, during the First World War, but during World War II the shorter model, with the turned down bolt handle was more common than the original long model with the straight bolt handle.

The latest version of the Mauser rifle is one designed for cheapened production and apparently put into use sometime during 1943. This is distinguished by numerous stamped parts and very rough manufacturing and finishing of the entire piece. Any of the earlier Model 98 Mausers are excellent for conversion to any American cartridge, but the models after 1943, while this conversion can be made, are not as desirable to work on as the earlier types.

During war times, both in World War I and II, these rifles were made in other German plants than that of Paul Von Mauser. They will be found marked with the German government armory marks of Erfurt and Spandau and also with code letters of other private armories. Some twenty-one other nations adopted the Mauser rifle between the time of its introduction and the beginning of World War II. Czechoslovakia used the standard German Mauser in the German caliber of 7.92 mm. This is distinguishable by the Czechoslovakian Lion seal on the ridge of the receiver at the rear of the barrel, and also usually by Czechoslovakian lettering of the words CESKA or BRNO.

Poland likewise used the Mauser in the standard German caliber, and Polish weapons carry the Polish double eagle mark and also usually the name in English letters of the Polish Armory at Radom on the Vistula River, Vistula being frequently shortened to VIS in gun marking.

Belgium adopted the Mauser in 7.65 mm. caliber and has manufactured them extensively there in the F. N. plant since the 1890s. The latest Polish, Czech, and Belgian Mansers are listed as the Model 1924, but do not differ materially from the M. 1898.

Spain, Mexico and a number of the South American countries also adopted the Mauser in 7 mm. caliber, and weapons from these countries will be found both with local armorers' marks. Some weapons used in these countries were imported by them from Germany and will be found to have German markings referred to above.

Japan's two military rifles, the original model of 1905-7, in 6.5 mm. and the later model 1939 in 7.7 mm. caliber were both basic Mauser actions with some variations, particularly including a light metal breech cover which travels with the bolt. Most Japanese weapons appear to be extremely poorly made and are frequently of very soft metal of bad quality. These are the only Mauser weapons that are generally considered not worthy of conversion to American hunting caliber cartridges.

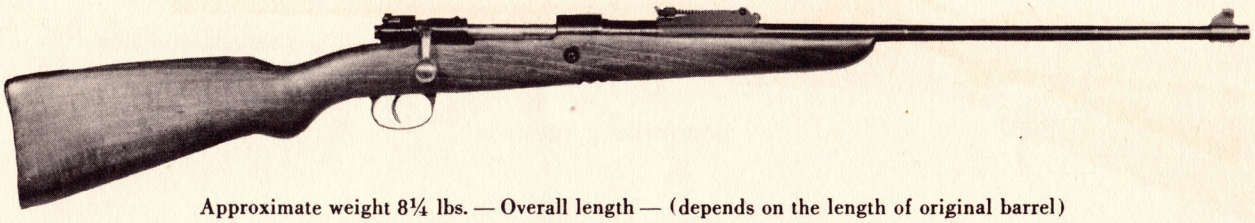
Of course our best known example of a Mauser adaptation in this country is the Model 1903 Springfield, which was developed directly from the Mauser between 1900 and 1903. This rifle is treated as a separate item.

The Mauser rifle Model 1898 is one of the best basic bolt actions in the world and is especially adaptable to conversions to sporting arms such as those listed on the opposite page.

Johnson Sporter Conversions of the Model '98 German Mauser Military Rifle

Send us your military rifle or action and we will rebuild it as follows:

JOHNSON SPORTER — MAUSER CONVERSION No. 1



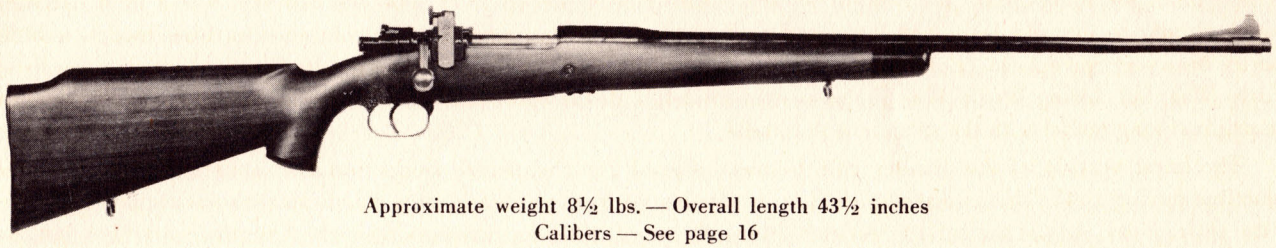
Approximate weight 8¼ lbs. — Overall length — (depends on the length of original barrel)
Caliber — 7.92 mm. x 57 mm. (8 mm. Mauser)

We inspect, proof fire and adjust the action, turning down the bolt handle if necessary — modify the military stock by shortening and rounding the forend, filling in unnecessary holes and removing the swivel if one is present — clean and re-varnish the stock — polish and blue all metal parts..... **Price $26.00**

Install Johnson Muzzle Brake, optional..... **Extra $10.00**

Cutting off and crowning barrel to any desired length and repositioning front sight..... **Extra $ 5.25**

JOHNSON TARGET SPORTER — MAUSER CONVERSION No. 2



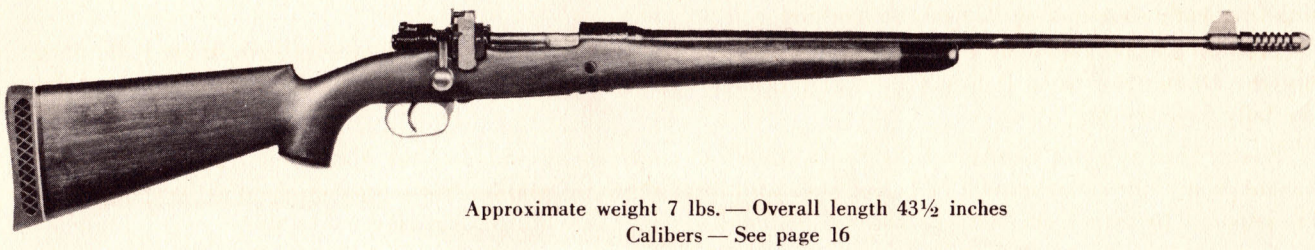
Approximate weight 8½ lbs. — Overall length 43½ inches
Calibers — See page 16

We inspect and adjust the action, turning down the bolt handle — alter the magazine and extractor to handle the cartridge selected — install Lyman 48 Micrometer peep rear and band 1/16 inch ivory bead ramp open front sight — install Johnson custom barrel in caliber selected of target sporter weight, 24 inch length — fit oil finished walnut sporter stock of standard dimensions with cheek piece, full pistol grip, Monte Carlo comb, plastic butt plate, pistol grip cap, and forend cap and non-detachable sling swivels — polish and blue all metal parts..... **Price $138.00**

Above conversion using original barrel in 8 mm. Mauser caliber..... **Price $ 91.00**

Install Johnson Muzzle Brake, optional..... **Extra $ 10.00**

JOHNSON FEATHERWEIGHT SPORTER — MAUSER CONVERSION No. 3



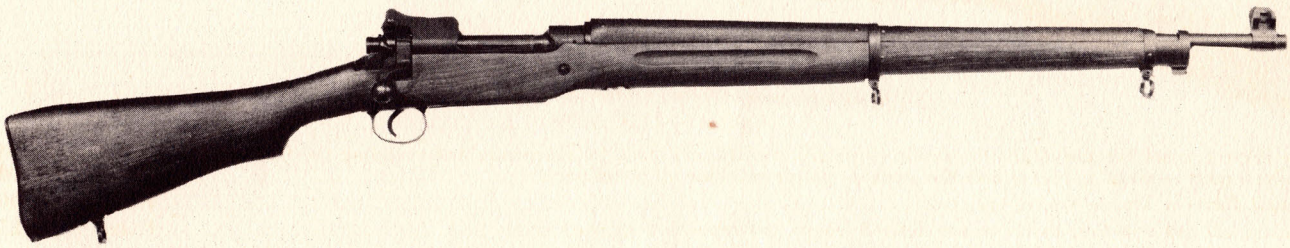
Approximate weight 7 lbs. — Overall length 43½ inches
Calibers — See page 16

We inspect and adjust the action, turning down bolt handle if necessary — alter magazine and extractor to handle the cartridge selected — install Lyman 48 Micrometer peep rear and open band front sight with 1/16 inch ivory bead — install Johnson Custom Featherweight barrel in caliber selected, 22 inch length — fit Featherweight oil finished walnut stock with full pistol grip, plastic pistol grip cap and forend cap and rubber recoil pad — install Johnson muzzle brake — polish and blue all metal parts..... **Price $161.00**

NOTE: All prices include polishing and blueing all exposed metal parts, function tests, and sighting.

See General Conditions on Page 21, and Pages 15 and 18 for Heavy Target and Bull Barrel weights and prices and magazine alterations for special cartridges. Alterations for other than .270 Win. and .30-'06 are extra on these jobs.

The U. S. Rifle, Caliber .30 Model of 1917
(THE ENFIELD)

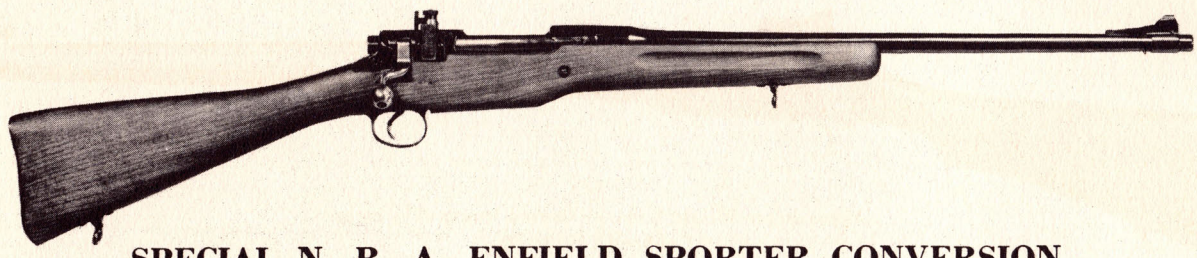


The United States rifle, caliber .30, Model of 1917, commonly called the Enfield, is a product of the emergency created by World War I and goes for its origin to a British rearmament program of 1914. The British Ordnance Department developed in 1914 a new rifle to replace the various models of Lee Enfield rifles that had been in use since about 1888. This rifle was a turning bolt Mauser type rifle, cocking on the closing stroke of the bolt and loading into a staggered column magazine by stripping cartridges from a charger type clip. The caliber was to be .276, using a rimless cartridge similar in general appearance but smaller than the standard U. S. .30-'06.

Plans had been made to retool the British Enfield Armory for this rifle when the war broke out in the summer of 1914. No time for retooling was available and it was therefore, necessary to continue the manufacture of .303 British Short Model Lee Enfield, chambered for the British .303 rimmed cartridge. More rifles than Britain could manufacture were needed and contracts were placed in this country with Winchester, Remington Ilion and Remington Eddystone for rifles of the general type of the Pattern 14, but chambered for the rimmed cartridge used in the Enfield.

These contracts were completed about the time of the United States entry into the war in 1917 and the Ordnance Department contracted for a modified version of Pattern 14 Enfield rifle, changed only in that the chamber and bolt were altered to take the standard U. S. .30 caliber Model of 1906 rimless cartridge. These rifles were designated as the U. S. Rifle, caliber .30 Model 1917 and have since been commonly called Enfields from their British origin, although the caliber is an American caliber and not that of the British Enfield. Over two million of these rifles were made during World War I. After the war they were stored as reserve weapons. They were sold from time to time, through the Director of Civilian Marksmanship, to members of the National Rifle Association at prices as low as $7.50 and, with the outbreak of World War II, they were first delivered in considerable quantities to the British after Dunkirk, under lend-lease provisions and then issued to American troops before sufficient Garands and other World War II weapons were available.

They are now again in Government stores as reserve weapons and are being sold to National Rifle Association members, through the Director of Civilian Marksmanship at $5.00 each. This represents an excellent value in rifles as the Enfield action is a particularly strong and well designed one, and is adaptable to sporter conversions even to Magnum cartridges. Modified to civilian use, it has been the basis for the Remington bolt action sporting rifle since shortly after World War I.



SPECIAL N. R. A. ENFIELD SPORTER CONVERSION

To produce the gun shown, we do the following work. First, clean out cosmoline, proof test your barrel and action, and check the headspace. Then, shorten the barrel to 24″ (or 22″, if specified), crown the muzzle, remove the Enfield rear sight and ears, and furnish and install Lyman ramp band front sight, and Lyman 48 rear sight. We polish all metal parts and blue complete with Johnson factory blue. We also cut down the issue stock to the illustrated sporter design and refinish it completely.

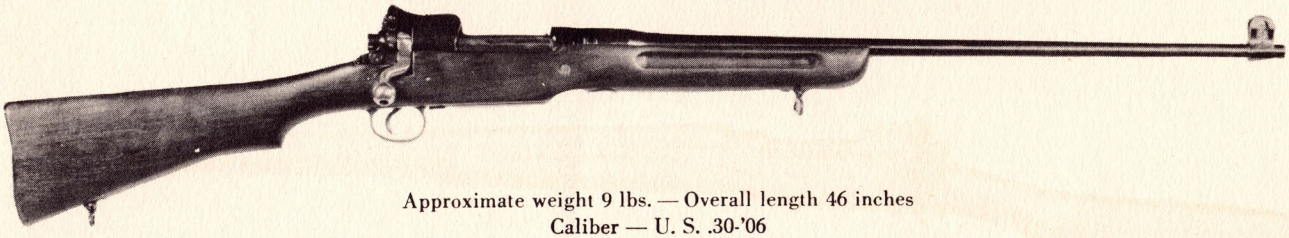
Price $50.00

If you want to do your own woodwork, we will do all the barrel and action work described above for **$38.50.**

Johnson Sporter Conversions of U. S. Model '17 (Enfield) Military Rifle

Send us your military rifle or action and we will rebuild it as follows:

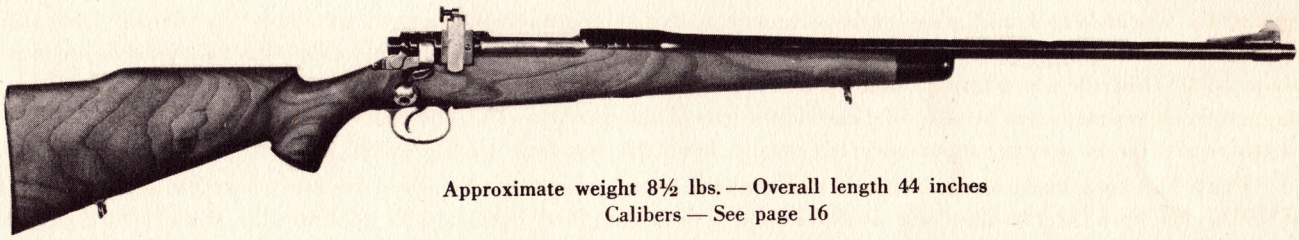
JOHNSON SPORTER — ENFIELD CONVERSION No. 1



Approximate weight 9 lbs. — Overall length 46 inches
Caliber — U. S. .30-'06

We inspect, proof fire and adjust the action — modify the military stock by shortening and rounding the forend and install sling swivel in the forend — clean and re-varnish the stock — polish and blue all metal parts..... **Price $27.00**
Install Johnson Muzzle Brake, optional..... **Extra $10.00**
Cutting off and crowning barrel to any desired length and repositioning front sight..... **Extra $ 5.25**

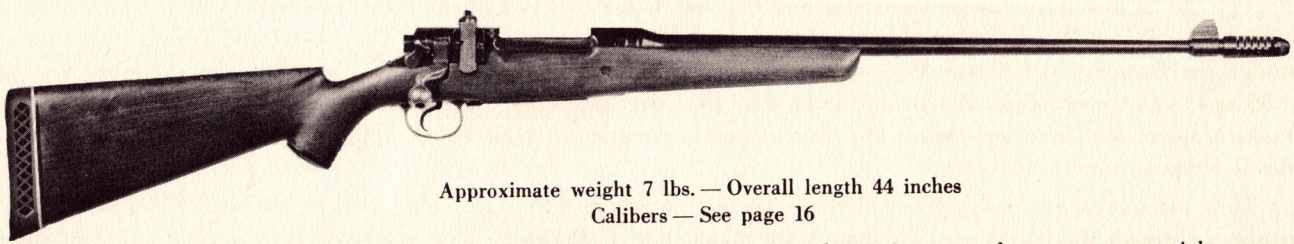
JOHNSON TARGET SPORTER — ENFIELD CONVERSION No. 2



Approximate weight 8½ lbs. — Overall length 44 inches
Calibers — See page 16

We inspect and adjust the action — reduce the magazine to five shot capacity — straighten trigger guard — remove rear sight ears and shape for rear sight — install Lyman 48 Micrometer peep rear and open ramp band front sight with 1/16 inch ivory bead — install Johnson custom barrel in caliber selected of target sporter weight, 24 inch length — fit oil finished walnut sporter stock of standard dimensions with cheek piece, full pistol grip Monte Carlo comb, plastic butt plate, pistol grip cap, and forend cap and non-detachable sling swivels — polish and blue all metal parts..... **Price $154.50**
Above conversion using original barrel in .30-'06 caliber..... **Price $111.00**
Install Johnson Muzzle Brake, optional..... **Extra $ 10.00**

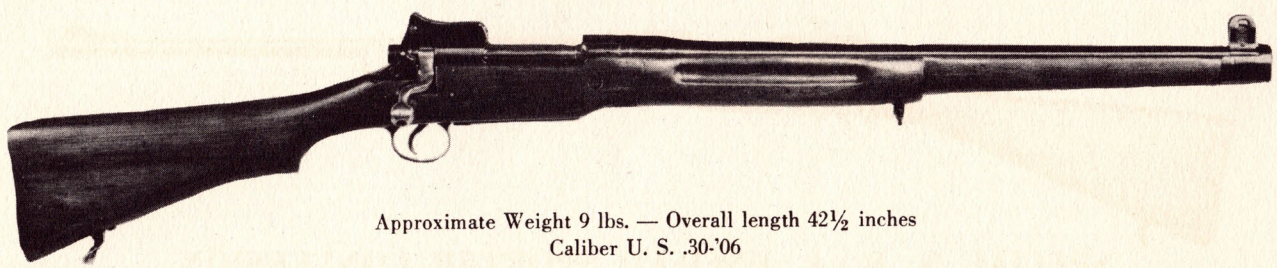
JOHNSON FEATHERWEIGHT SPORTER — ENFIELD CONVERSION No. 3



Approximate weight 7 lbs. — Overall length 44 inches
Calibers — See page 16

We inspect and adjust the action — reduce magazine to five shot capacity — straighten trigger guard — remove rear sight ears and shape for rear sight — install Lyman 48 Micrometer peep rear and open band front sight with 1/16 inch ivory bead — install Johnson custom Featherweight barrel in caliber selected, 22 inch length — fit Featherweight oil finished walnut stock with full pistol grip — plastic grip cap and forend cap and rubber recoil pad — install Johnson muzzle brake — polish and blue all metal parts **Price $177.50**

Johnson Sporter-Special "Knockabout" Enfield Conversion No. 4



Approximate Weight 9 lbs. — Overall length 42½ inches
Caliber U. S. .30-'06

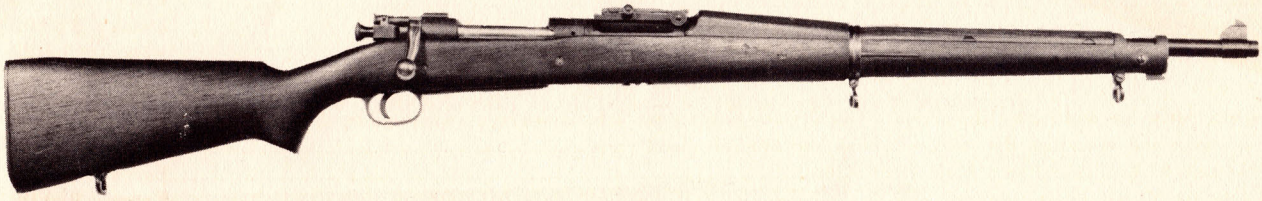
For a handy gun designed to withstand rough treatment we recommend this "knockabout" conversion of the M1917 rifle based on the article in the October 1917 Rifleman by L. E. Capek. To produce the gun shown we do the following:

Disassemble and clean out cosmoline — inspect, adjust, headspace and proof test the action — cut the barrel to 22 inches, crown it, and reposition the front sight — remodel the forward band — furnish and attach forward sling swivel, polish and blue all metal parts — and reassemble complete. Price **$18.00.**

NOTE: This job does not include remodeling or refinishing the stock as this is not necessary to produce the model as shown.

See General Conditions on Page 21, and Pages 15 and 18 for Heavy Target and Bull Barrel weights and prices and magazine alterations for special cartridges.

The U. S. Rifle, Caliber .30 Model of 1903
(THE SPRINGFIELD)



The U. S. rifle, caliber .30 Model 1903, better known as the Springfield, as it was first manufactured at the Springfield Armory, though it has since been made at Rock Island arsenal and the Remington Arms Co., has proven itself many times as one of the best bolt action military rifles in the world. Its development goes back to the time of the Spanish-American war when it was demonstrated that the first small caliber rifle which we adopted, the Krag-Jorgensen Models of 1892 and 1898, was slower in action, and the cartridge was poorer in design than the Model of 1891 Mauser rifle used by the Spaniards. Ordnance research produced two or three different models of rifles all basically similar to the German Mauser which culminated in the weapon we know as the Springfield Model of 1903.

This is a five shot, staggered column magazine, bolt action rifle, loaded from a Mauser type charger from which the cartridges are stripped into the magazine by one pressure of the thumb. The bolt is a modified Mauser bolt having as its principal difference from the Mauser, a cocking piece at the rear which can be drawn back by the thumb and finger, or let down without firing the piece. It also uses a magazine cutoff not present on most Mauser models. It was, however, close enough in design to the Mauser so that royalties were paid to the Mauser Rifle Company for some years for its use. It was first issued about 1905 and its original form used a cartridge with a 220 grain round nosed bullet at a muzzle velocity of slightly over 2,000 feet per second. After this early issue it was decided to adopt a 150 grain Spitzer type bullet at 2,650 feet per second and the cartridge case neck was altered to handle the shorter bullet.

Most of the rifles that had been issued were called in and the barrels were rechambered and shortened to take the new cartridge which was described as the United States cartridge, caliber .30 Model of 1906. This accounts for the apparent discrepancy in model names, the Model 1903 rifle using a 1906 cartridge. These were the rifle and cartridge with which the First World War was fought, with the Model 1917, or Enfield, as a supplementary weapon chambered for the same cartridge, and various earlier arms used for training and guard purposes in the United States.

The receiver steel of the '03 rifle has been changed twice since its first production. Rifles numbered below 800,000 have case hardened receivers of relatively soft steel. Those from 800,000 to 1,275,767 used tougher steel double heat treated, and those above the latter figure are made of nickel steel. The change to modern steel took place in M 1903 rifles made at Rock Island after No. 285-507. The later types have a greater margin of safety for use with modern high pressure loads.

During the early part of World War II, to supply the tremendous demand for small arms, a "streamline production" version of the Springfield rifle listed as the M1903-A3 was manufactured to the quantity of slightly over 1,000,000 by the Remington Arms Company of Illion, New York. This rifle is distinguishable by the use of pressed steel rather than forged steel parts in such items as trigger guard bands, and so forth, and use of an adjustable peep rear sight on the receiver bridge instead of the original folding sight situated at the breech of the barrel.

In general characteristics, ammunition, and so forth, the weapon is identical to the original model 1903 Springfield rifle.

The Springfield remained the standard service rifle of the United States Army until 1936 when the U. S. Rifle, caliber .30 M1, commonly known as the Garand, was adopted. However, until sufficient quantities of automatic arms were manufactured, a great many units of the American Army went into battle equipped with the time tried Springfield, and it acquitted itself with its usual excellence.

The Springfield rifle is now being offered for sale to members of the National Rifle Association, by the Director of Civilian Marksmanship, and is now as it always was, an excellent weapon for conversion to sporting purposes.

Johnson Sporter Conversions of the U. S. Model of 1903 (Springfield) Military Rifle

Send us your military rifle or action and we will rebuild it as follows:

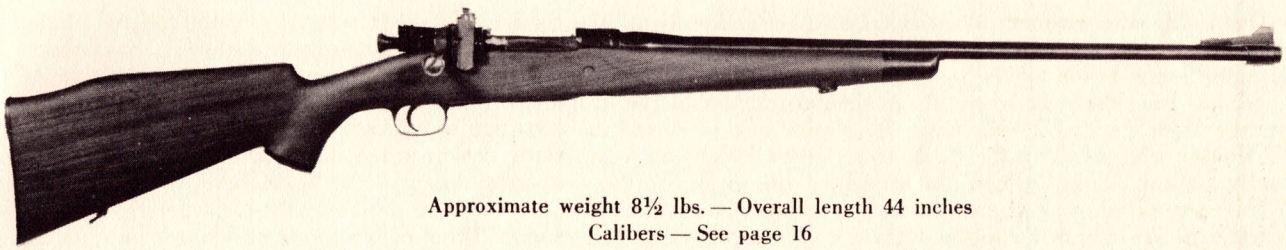
JOHNSON SPORTER — SPRINGFIELD CONVERSION No. 1

(made from an M1903-A3 as sold by the D.C.M.)

Approximate weight 8¼ lbs. — Overall length 43½ inches
Caliber — .30-'06

We inspect, proof fire and adjust the action — modify the military stock by shortening and rounding the forend — install a front sling swivel — clean and re-varnish the stock — polish and blue all metal parts..... **Price $27.00**
Install Lyman 48 Rear and Ramp Band front sight..... **Extra $25.00**
Install Johnson Muzzle Brake, optional..... **Extra $10.00**

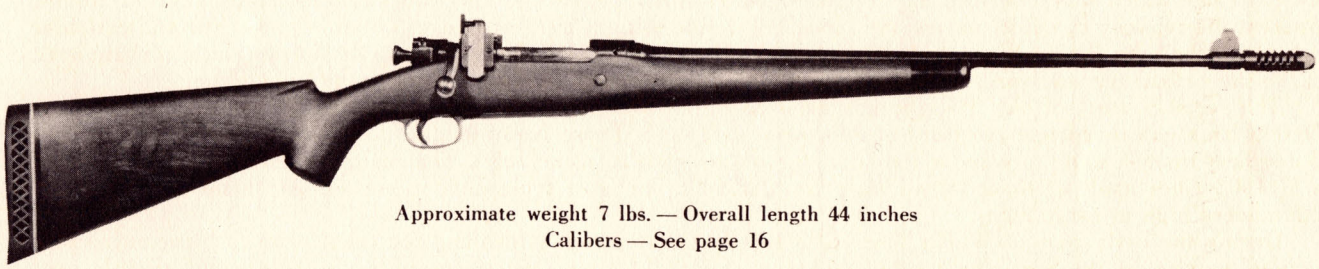
JOHNSON TARGET SPORTER — SPRINGFIELD CONVERSION No. 2



Approximate weight 8½ lbs. — Overall length 44 inches
Calibers — See page 16

We inspect and adjust the action — install Lyman 48 Micrometer peep rear and open ramp band front sight with 1/16 inch ivory bead — install Johnson custom barrel in caliber selected of target sporter weight, 24 inch length — fit oil finished walnut sporter stock of standard dimensions with cheek piece, full pistol grip — Monte Carlo comb, plastic butt plate, pistol grip cap, and forend cap and non-detachable sling swivels — polish and blue all metal parts..... **Price $132.00**
Above conversion using original barrel in .30-'06 caliber..... **Price $ 86.00**
Install Johnson Muzzle Brake, optional..... **Extra $ 10.00**

JOHNSON FEATHERWEIGHT SPORTER — SPRINGFIELD CONVERSION No. 3



Approximate weight 7 lbs. — Overall length 44 inches
Calibers — See page 16

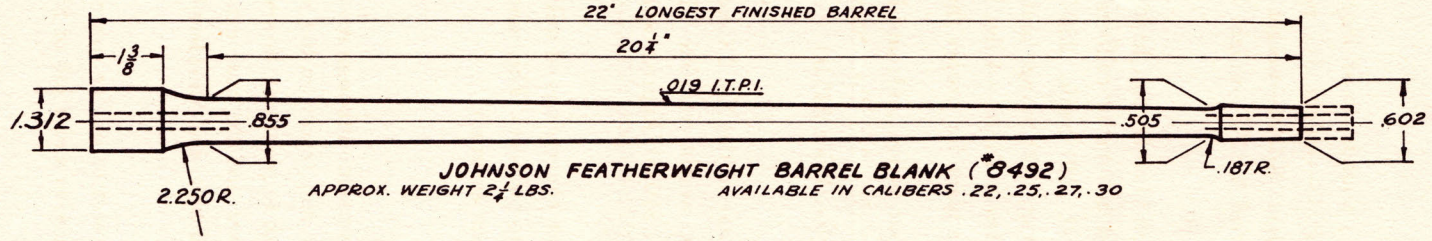
We inspect and adjust the action — install Lyman 48 Micrometer peep rear and open band front sight with 1/16 inch ivory bead — install Johnson custom Featherweight barrel in caliber selected, 22 inch length — fit Featherweight oil finished walnut stock with full pistol grip — plastic grip cap and forend cap and rubber recoil pad — install Johnson muzzle brake — polish and blue all metal parts..... **Price $155.50**

NOTE: All prices include polishing and blueing all exposed metal parts, function tests, and sighting.

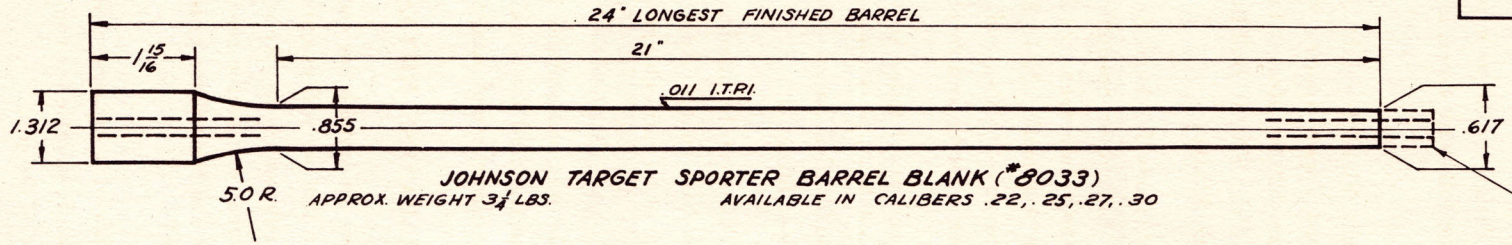
See General Conditions on Page 21, and Pages 15 and 18 for Heavy Target and Bull Barrel weights and prices and magazine alterations for special cartridges.

JOHNSON BARREL DESIGNS

BARREL SPECIFICATIONS			
CAL.	TWIST		
.22	14"	16"	
.25	10"	12"	14"
.27	10"	12"	
.30	10"	12"	

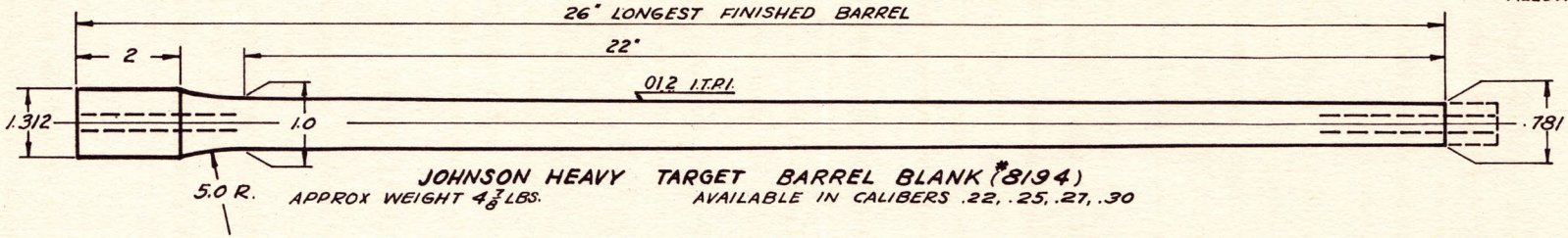


JOHNSON FEATHERWEIGHT BARREL BLANK (*8492)
APPROX. WEIGHT 2 1/4 LBS. AVAILABLE IN CALIBERS .22, .25, .27, .30

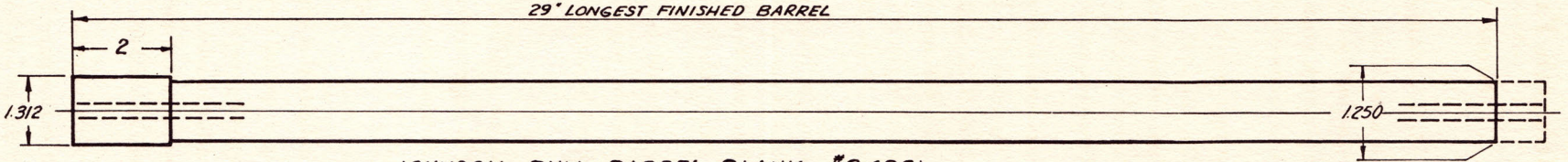


JOHNSON TARGET SPORTER BARREL BLANK (*8033)
APPROX. WEIGHT 3 1/4 LBS. AVAILABLE IN CALIBERS .22, .25, .27, .30

DOTTED PORTION INDICATES CUTOFF ALLOWANCE



JOHNSON HEAVY TARGET BARREL BLANK (*8194)
APPROX WEIGHT 4 3/8 LBS. AVAILABLE IN CALIBERS .22, .25, .27, .30



JOHNSON BULL BARREL BLANK (*8493)
APPROX. WEIGHT 10 1/4 LBS. AVAILABLE IN CALIBERS .22, .25, .27, .30

BULL BARREL BLANKS ARE ALSO AVAILABLE TAPERED TO MINIMUM MUZZLE DIAMETER OF .875 TO FINISH MINIMUM 26" LONG (*8561)

NOTE ~ ALL DIMENSIONS ARE MAXIMUM AND APPROXIMATE

Johnson Target and Sporter Barrels for gunsmiths and those who wish to do finishing work at home

During the war, Johnson Automatics produced hundreds of thousands of rifle and machine gun barrels for the United States and various allied governments. With the same facilities we are now producing target and sporter barrels to the same exacting specifications, but to our own design, in the most popular sporting calibers. These are available from stock for high grade re-barrelling jobs, in the following types, and in suitable calibers among those listed for the actions to be used with them.

(A) Blanks only, in four weights as follows:—Featherweight ※8492—weight 2¼ pounds, finish length 22 inches, calibers .22, .25, .27 and .30—Price $20.00. Standard Target Sporter ※8033—weight 3¼ pounds, finish length 24 inches, calibers .22, .25, .27 and .30—Price $20.00. Heavy Target ※8194—weight 4⅞ pounds, finish length 26 inches, calibers .22, .25, .27 and .30—Price $20.00. Bull Barrel ※8493—weight 10¼ pounds, finish length 29 inches, calibers .22, .27 and .30—Price $25.00.

(B) The above blanks semi-finished and rough chambered, ready for hand finish chambering, head-spacing, and proof testing, threaded for and attached to Mauser, Enfield or Springfield actions in calibers .22 Hornet, .22-3000, .22-3000 R 2, .218 Bee Improved, .219 Zipper Improved, .22-250, .220 Swift, .250-3000 Savage, .257 Roberts, .270 Winchester, .30-'06, .30 Remington Automatic, .30-40 Krag, .300 Savage and .300 H & H Magnum.—Featherweight 1¾ lbs. Standard Target Sporter—2½ lbs., and Heavy Target—4 lbs. Price $30.00. Bull Barrel—10 lbs., Price $40.00. (In ordering, action must be sent to our plant for proper thread fitting.)

(C) Same as B above, but finish chambered, headspaced and proof tested in your action and outside finished to standard Johnson dimensions, ready for polishing and blueing. Featherweight—1¾ lbs., Standard Target Sporter—2½ lbs., and Heavy Target—4 lbs. Price $35.00. Bull Barrel—10 lbs. Price $45.00.
(In ordering, action must be sent to our plant for proper fitting.)

NOTE: The heavy target barrel described and illustrated No. 8194 can be fitted to any of the No. 2 Conversions jobs appearing on the preceeding pages in suitable calibers at no extra charge. Approx. weight complete—10¼ lbs. The Bull barrel No. 8493 can be supplied in the No. 2 Conversion at an extra charge of $10.00. Approx. weight complete —15½ lbs.

All the foregoing are *new* barrels manufactured since the war, and suitable for conversions of military rifles to sporters. Items in A are approximately one inch longer than standard for working purposes. This amount must be cut from the muzzle at final finishing to insure uniform bore diameter and maximum accuracy.

SPECIAL NOTE ON JAPANESE RIFLES

As recent tests indicate that some Japanese military rifles are suitable for conversion, although most are not, we are now inaugurating a special service on these weapons, in that we will examine and report on the suitability for conversion, subject to our general conditions, any Japanese rifle sent to us. We wish to point out, however, that only those rifles of the earlier model, in which the tang at the rear end of the receiver and the rear extension of the trigger guard are both separate pieces fitted to the receiver and the trigger guard unit, are considered suitable for reconversion to American calibers.

We will disassemble, inspect, and report on the suitability of a Japanese rifle sent to us, for conversion subject to our general conditions on page 21, for $2.50. If the weapon is suitable for conversion and a job of $35.00 or over is ordered, the $2.50 charge will be applied on the total cost of the job.

Available Calibers for Johnson Barrels and Conversions

We can at present chamber for the following calibers any of our 4 weights of barrels and fit them to any action suitable for them:

.22 Long Rifle, .22 Hornet, .22-3000, .22-3000 R2, .218 Improved Bee, .219 Improved Zipper.

NOTE I: We do not adapt military repeating actions to the above calibers but can rebarrel most military bolt actions in them to be used as single shots only, provided the bolt face and extractor can be altered to handle the desired cartridge. We can also rebarrel single shot actions in these calibers.

NOTE II: On calibers .218 Improved Bee, and .219 Improved Zipper, these chambers are of the newer sharp shoulder type, but are so designed that standard factory ammunition can be shot in them; and actual improvement of accuracy is noted even with regular factory loads. We can also supply the proper dies for reloading the improved shaped cases for those who wish to reload their ammunition.

.22-.250, .220 Swift, .250-3000 Savage, .257 Roberts, .270 Winchester, .30-40 Krag, .30-'06, .30 Remington Automatic, .300 Savage, .300 H & H Magnum.

NOTE 1: We adapt these calibers to any suitable bolt action of the proper strength and type to handle the cartridge desired. Most of them are adaptable to the No. 2 and 3 Conversions of Mauser, Enfield and Springfield Rifles listed in earlier pages, although some require magazine alterations as listed on page 18.

NOTE II: We can also rechamber 8.15 x 46 mm. Rimmed Mauser caliber rifles for the .32 Winchester special cartridge and adapt the bolt head and extractor to this case for $17.50.

LOADING TOOLS FOR SPECIAL CALIBERS

In connection with our offering of a number of calibers not in regular factory production, we can also make to order sizing dies for forming the cases and individual bullet seating tools for use in conjunction with standard loading equipment. The .22-3000 and .22-3000R2 are made by necking down the .25-20 single shot case to .22 caliber and fire-sizing it with a light load in the special chambers of these designs. We can supply a full length sizing tool for shaping the case and a bullet seating tool which seats the bullets by hand after the case necks have been expanded to .224 with standard loading equipment and the cases have been de- and recapped and charged with powder on a regular tool.

In the case of the .218 Improved Bee, it is only necessary after fire-sizing, to neck resize with any standard sizing equipment for this cartridge and neck expand to an interior diameter of .224, then reload the cartridge with the use of our special bullet seating tool in addition to regular de- and recapping equipment and an adjustable powder charger.

The .219 Improved Zipper can also be handled the same way but more satisfactory cases are made by forming them with the full length resizing die which we can supply, from .25-35 cases, fire-sizing them with a light load and then reloading with standard equipment with the exception of the bullet seating tool which we supply.

On the .22-.250, this case can be formed from the .257 Roberts or .250-3000 Savage by the use of a single full-length re-sizing die and then cutting the neck to an over-all case length of 1.940″. Cases can also be formed from standard .30-06 cases by first re-sizing to .250-3000 Savage or .257 Roberts and then a second re-sizing operation in the die supplied by us, again cutting the neck to an over-all case length of 1.940″. Then neck expand to .224 and load with our special bullet seating tool in conjunction with standard loading equipment.

Full-length re-sizing die for any of the above calibers, made to correspond to the chamber supplied and suitable for use with any arbor type press ..... Price $6.00

Bullet seating tool in any of the above calibers consisting of base, full-length die, and bullet seating plunger which can be used as a unit by hand ..... Price $15.00

SINGLE SHOT RIFLES

We have many requests for rebarreling of single shot actions of both American and foreign makes and have recently made this service available to shooters. We can rebarrel single shot actions in such calibers of those that we have available as are suitable for the individual action to be rebarreled. As these actions vary greatly in type and style, we can quote only generally. But most jobs require one or more of the following items:

Rebarrel in any of our 4 weights of barrel including rebluing all metal parts $47.00

*Bush breech block with hardened steel bushing and replace firing pin with new one of hardened steel .065 in diameter $15.00

If attachment to the barrel of tapped blocks for springs or fore stock fittings is required, this will be estimated and quoted on individual jobs.

*This is necessary in most rifles originally designed for black powder or low pressure smokeless unless it has already been done.

DCM RIFLES

As of November 1947 the Director of Civilian Marksmanship is again selling both Springfield and Enfield United States Military Rifles to members of the National Rifle Association. The following rifles are listed as available:

*Enfield M1917 (Unserviceable) ..... $ 5.00

*Springfield M-1903 (Unserviceable) $15.00

An unserviceable rifle is "one which has not been inspected and consequently is unsafe to fire until examined by a competent person (gunsmith) to insure that all safety factors exist including a test for head-space, not greater than 1.946 inch."

Also Springfield Model 1903 (Serviceable) $30.00

Springfield Model 1903-A3, new and used ..... $50.00 each

Excise tax of 11 percent on Model 1903-A3 new rifles only. All others are tax free. One Springfield and one Enfield rifle, either new or used, can be purchased by each member of the National Rifle Association through this service. A new price list of all material available is also ready for sending out to all inquirers by the Director of Civilian Marksmanship. Orders are accepted under the following conditions:

1. Address the Director of Civilian Marksmanship, Department of the Army, Washington 25, D. C.
2. Copy the following certificate and sign it:

"I desire to purchase the ordnance items as listed for my own use and not for resale. My National Rifle Association Membership card is enclosed herewith. If I have listed either the Springfield or Enfield rifle, I certify that I have not purchased a rifle of the same model through the DCM since 1945 and I also agree to accept either or both (M-1903-A3 rifles excluded) in whatever condition it may arrive from any shipping point in the continental United States. Furthermore, I understand that a rifle classified as 'unserviceable' is unsafe to fire until examined by a competent person such as a gunsmith, to insure that all safety factors exist, including a test for head-space not greater than 1.946 inch."

3. DO NOT send remittance covering your DCM purchase, but enclose your NRA identification card.

JOHNSON INSPECTION SERVICE

For the benefit of shooters purchasing any of the above rifles we will de-grease, inspect thoroughly, headspace and proof fire with two proof rounds any of the above rifles sent to us and make a full report on them for five dollars. In cases where these rifles are sent to us for any of our standard conversion jobs or any rebarreling job, this service is performed free of charge.

*It has been our experience that most of the rifles classed as "Unserviceable" are so classified because of, at most, excessive headspace or some other defect that would be corrected in the normal course of our No. 2 or No. 3 Conversion Jobs, or that can be corrected at a reasonable price.

METAL WORK SPECIALTIES

As we find that many shooters like to do their own stocking, but do not possess the facilities for heavy metal work, we wish to call particular attention to our rebarrelling and metal work services.

Typical jobs are as follows:

1. Basic rebarrelling job, with featherweight, standard target sporter or heavy target barrel, which includes polishing, blueing, head spacing, and proof testing but no sights or other work, applied to military actions in any suitable caliber. Price $37.00.
2. The above job, plus Lyman 48 rear and ramp band front sights. Price $62.00.
3. The Number 2 job, plus alteration of the magazine and extractor to handle .270 or .30-'06 ammunition from a Mauser 8 mm. action. Price $67.00.
4. The Number 2 job plus alteration of the magazine of a military action to handle the .220 Swift cartridge. Price $79.50.
5. Either the Number 3 or Number 4 job without sights. Number 3—Price $42.00. Number 4—Price $52.00.

Extra on any of the above jobs for Bull Barrel—$10.00.

We have at present a limited number of Mauser military actions which we can supply for these jobs at a charge of $30.00 for the action added to the above prices.

GENERAL PRICE LIST—GUNSMITHING WORK

BARRELS

Furnish and install new Johnson barrel, featherweight, Standard or Heavy Target (see page 16 for calibers) head-space, proof-test, polish and reblue action and barrel and alter the extractor, in suitable military bolt action (except Japanese)	37.00*
Furnish—install Johnson barrel in Japanese action	47.00
Same job as above furnishing Johnson Bull barrel	47.00
Special contour—extra	10.00
Shorten and crown any barrel	1.75

**See General Conditions on inside of back cover.*

ACTIONS

Inspect and adjust action	3.50
Proof-test (2 rds.) barrel and action and check head-space	2.00

SIGHTS

Install any commercial rear sight, labor only*	3.50
Install any dovetail front sight, labor only	3.50
Install shotgun bead sight	1.75
Install any ramp band front sight, labor only	1.75
Reposition front sight, labor only	3.50
Install scope mounts (1 piece mount except* Weaver, Jaeger or Griffin & Howe mounts), labor only	5.00
Install Jaeger mounts, labor only*	10.00
Install Griffin & Howe mounts, labor only*	10.00
Install scope blocks (2 piece mount), and Weaver side mounts, labor only	7.00
Bore sighting	1.50
Sighting in shooting on 100 yd. range	2.50

**Additional charge if it is necessary to alter stock to fit.*

STOCKS

Hand inletted, walnut, with cheekpiece pistol grip cap, butt plate and tenite fore-tip, oil finish	51.00*
Hand inletted, featherweight, walnut, with pistol grip cap, butt plate, oil finish, but without cheekpiece	56.00*
Furnish and install non-detachable swivels	5.00
Furnish and install quick-detachable swivels	6.50
Refinish stock—oil	10.00
Refinish stock—varnish	6.00
Furnish and install recoil pad	8.00

**For Mauser, Springfield or Enfield — other types quoted on request.*

MAGAZINE ALTERATIONS

Lengthen and alter Mauser magazine when necessary to handle American ammunition of .30-'06 length	5.00
Alter and shorten Springfield or Mauser magazines when necessary for American ammunition of .220 Swift length	17.50
Alter Mannlicher Schoenauer rotary magazine for American ammunition	17.50
Alter Enfield (M1917) magazines and bolts for .300 H & H Magnum	30.00
Alter Enfield (M1917) magazines to 5 shot capacity and straighten trigger guard	14.00

MISCELLANEOUS

Alter rimless cartridge type bolt – face and extractor to handle rimmed cartridges. Price	5.00
Alter Mauser Springfield or Enfield trigger pull to single stage, adjustable	3.50
Alter Enfield bolt to cock on opening	12.00
Mill off ears of Enfield rear sight base and shape for sight	7.00
Remove front sight ears, Enfield	1.75
Alter any bolt handle for scope mounting	10.00
Alter any safety for scope mounting	6.75
Install Johnson Standard or Magnum Muzzle Brake	3.00*
Install Weaver Chokes, labor only	3.50
Install Cutts compensator, labor only	3.50
Install Redfield safety, labor only	1.75

**Extra charge if it is necessary to relocate the front sight, or install adapter on barrels less than .600" muzzle outside diameter.*

JOHNSON BLUING SERVICE

The deep, lustrous, blue finish which is a characteristic of all Johnson Custom Sporters results from careful polishing, cleaning, and bluing by the latest factory methods. This beautiful finish can be applied to any make of rifle, shotgun, or handgun at the following prices:

Rifles and shotguns	10.00
Handguns	8.50

Prices apply only if weapon is in suitable condition for refinishing.

GENERAL PRICE LIST—ACCESSORIES

Sights:

Lyman #48 micrometer rear sight — peep	$13.00
Redfield #70 micrometer rear sight — peep	8.50
Redfield #102 peep sight	5.75
Marble Flat Top, Semi-Buckhorn or full Buckhorn rear sight	2.00
Lyman #17 A Hooded Front Sight	3.00
Standard front sight (dovetail)	1.00
Redfield ramp band front sight, hooded	8.50
Redfield ramp band front sight, without hood	7.50
Lyman ramp band ivory bead front sight	6.00
Any open rear sight with correspondingly low mounted ramp band front sight, sights furnished and installed	12.00
Any rifle bead	1.25
Any shotgun bead	1.00

Scope Mounts:

Redfield Jr. mount for Weaver 29 S, 330, 440	10.75
Redfield Jr. mount for Lyman Alaskan	12.75
Redfield Jr. mount for Weaver K 2.5	14.75
Echo mount	17.50
Weaver U mounts, top and side for K scopes	6.25
Weaver Q mount	5.75
Weaver N mount for J 2.5 scope	2.00
Griffin & Howe mounts	25.00
Jaeger mounts	25.00

Telescopic Sights:

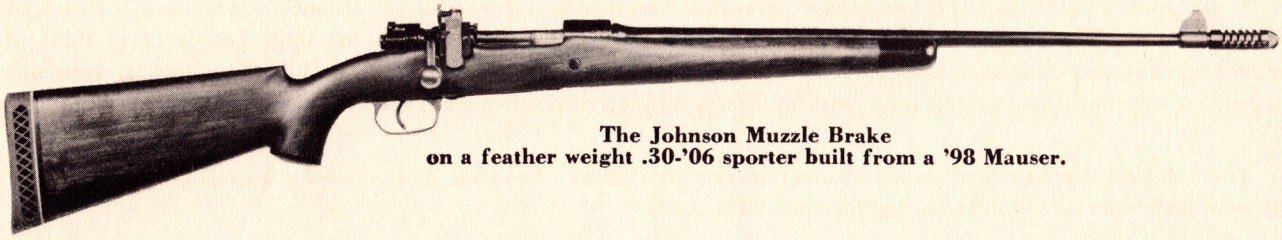
Lyman Alaskan, standard reticule (#1)	60.00
Lyman Alaskan, Lee dot reticule	72.50
The Texan	50.00
Weaver K 2.5	37.50
Weaver J 2.5	22.50
Weaver 440	44.50
Weaver K .4 scope	45.00

Miscellaneous:

Redfield safeties	5.75
Weaver Chokes (with any 2 tubes)	10.25
Extra tubes, each	1.75
Cutts Compensator	18.50
Additional tubes, each	3.00
Johnson Standard Muzzle Brake	7.00
Johnson Magnum Muzzle Brake	17.00

THE JOHNSON MUZZLE BRAKE or RECOIL REDUCER

Get More Kick Out Of Your Shooting By Taking Kick Out Of Your Rifle



The Johnson Muzzle Brake on a feather weight .30-'06 sporter built from a '98 Mauser.

The Johnson Muzzle Brake is a development of recoil reducing appliances used during World War II on European weapons ranging from automatic rifles to anti-aircraft artillery.

It's purpose and functions are three-fold. First and foremost, it reduces the kick on the shooter's shoulder between 40 and 50 per cent. This has been determined by scientific tests of two different types. One gave a reduction of approximately 40 per cent and the other a reduction of approximately 50 per cent. It also softens the characteristic sharpness of the blow to a less punishing push so that the shooter actually feels a greater reduction than is shown by the test records.

Second, it almost completely eliminates the jump of the muzzle that accompanies the usual kick, and is the most punishing feature of it on the face of the shooter. This leaves the sights far better aligned to the target for the next shot, which is, of course, particularly important in the hunting field.

Third, by damping vibration it actually improves accuracy to a measurable degree, especially when it is applied to the featherweight barrel in which heavy calibers without excessive recoil are made possible by the muzzle brake.

In accomplishing this the brake diverts the gasses at the muzzle in a sideways direction and consequently there is an apparent increase and higher pitch in the noise of the shot. This should not be troublesome in the game field as one or two shots are not particularly noticeable. In target or general firing where a considerable number of shots are fired, we recommend plugging the ears with cotton or cleaning patches, a practice usually followed by experienced shooters in any case.

The brake is 2-7/16 inches long, ¾ of an inch in diameter and two ounces in weight. It is simple and easily cared for, and made of barrel type steel blued to match standard gun blueing. It screws on the muzzle of most rifles .25 to .32 caliber and is locked in position by a set screw. It should be left on the gun at all times and can be cleaned in position as easily as the rest of the rifle.

We recommend shipping your gun to our plant for attachment of the muzzle brake as absolute alignment with the bore is a fundamental necessity. If this is not possible the brake is attachable by any qualified gunsmith with adequate machine facilities.

Price	$7.00
Installation	* 3.00
Total Installed	*$10.00

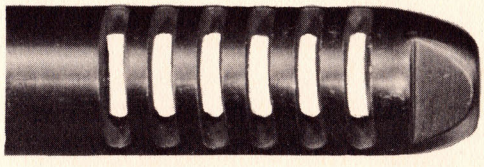
**Extra charge if front sight must be relocated, or adapter installed on barrels less than .600" muzzle ouside diameter.*

THE JOHNSON MAGNUM MUZZLE BRAKE

The new Johnson Magnum Muzzle Brake is made for calibers .300 H. & H. Magnum, .348 Winchester, .375 H. & H. Magnum, .405 Winchester and other "Magnum" or heavily loaded cartridges between .30 and .40 caliber.

It is similar in appearance and effect to the Johnson Standard Muzzle Brake except for its increased size. Length 3 1/16", Diameter 1", Weight 4 oz.

Price $17.00—Installation $3.00—Total Installed $20.00



The Johnson Standard Muzzle Brake, full size Magnum Brake, about 2/3 size

THE JOHNSON OVERHAUL AND RECONDITIONING SERVICE

A car needs a "2000 mile oil and grease" at stated intervals, and a refinishing job once in a while if it is to look and run its best. The average car owner does these things as a matter of course, but most people never think of having the guns they normally keep several times as long as a car treated the same way. Take a look at your gun and see if it would not be a safer, better working, better looking piece after similar treatment.

The Johnson overhaul and reconditioning service will do this for your gun, assuming that it is only in rough, rusty and poor operating condition, but has no broken parts.*

1. Disassemble your gun.
2. Clean and polish it inside and out.
3. Blue all metal parts with Johnson Factory blue.
4. Reassemble it.
5. Adjust and check the action.
6. Lubricate it thoroughly for use or storage as you direct.

Price — Rifles and Shotguns $13.50
Handguns $12.00
Rifle and Shotgun Stocks Refinished — extra $10.00

*If on disassembly we find broken parts we will report to you immediately on their replacement cost and availability. If you do not want your gun repaired, we will reassemble it and return it to you for an inspection charge of **$4.50.**

GENERAL CONDITIONS

*All rebarreled weapons will be prooftested for your personal protection. Should any damage result from such prooftesting, this Company will not assume any liability whatsoever, nor for any damage in subsequent firing by the owner, and all work done up to the time of testing will be charged for at regular rates. This constitutes a condition precedent to our acceptance of any work. Do not send gun cases or trunks, as we cannot be responsible for their safe return.

Prices are estimated to the best of our ability without examination of the work contemplated and will be adhered to except in cases of unforeseen complications. Should these circumstances arise, authorization for additional charges will be requested.

All prices are based on receipt of actions or weapons suitable for the work involved at our Plant, Johnson Automatics Mfg. Co., Providence 1, R. I., at no expense to us. All shipments to us should be made prepaid. All return shipments will be made F.O.B. our Plant.

Terms: Cash with order or C.O.D. shipments unless satisfactory credit arrangements have been previously made.

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

THE JOHNSON INDOOR TARGET GUN

The Johnson Indoor Target Gun is a new Johnson product designed to provide harmless and instructive sport for shooters of all ages. Its elastic driven pellets of .175 inch shot will not break the average pane of glass, but it is built with precision enough for real target shooting, such as will improve your accuracy with any weapon. Safe fun for the kids — a sport of skill for grown-ups.

The Johnson Indoor Target Gun is an elastic driven repeater with a magazine capacity of 65 shots, and accurately made sights adjustable for both windage and elevation. It is capable of 5 to 10 shot groups of less than ½ an inch at 20 to 25 feet. .....Price $15.00.

Johnson Indoor Target Guns are available at sporting goods and department stores. If your dealer cannot supply you write direct to us.